WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 8/30/12
API #: 047-005-02241

Farm name: Boone East Development Co. Operator Well No.: NREC # 46

LOCATION: Elevation: 1698.19' Quadrangle: Wharton 7.5'

District: Crook County: Boone
Latitude: 3923 Feet South of 37 Deg. 57 Min. 30 Sec.
Longitude 9892 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: New River Energy Corp.

Address: 125 Hurricane Branch Rd	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Chapmanville, WV 25508	16	30	0	
Agent: Timothy E. Comer	13 3/8	180	Open Hole	
Inspector: Barry Stollings				
Date Permit Issued: 11/09/2007				
Date Well Work Commenced: 7/23/07				
Date Well Work Completed: 7/24/07				
Verbal Plugging: Yes, Per Carlos Hively				
Date Permission granted on: 7/23/07				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 180'				
Total Measured Depth (ft): 180'				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? Y				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

Second producing formation_____ Pay zone depth (ft)_____
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____MCF/d Final open flow _____Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

9/4/12
Date

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes_____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list None

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth

Surface:

WR-35
Rev (5-01)

DATE: 3/1/12
API # : 47-011-00994

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Eustace & Della Blake Operator Well No.: HR 436

LOCATION: Elevation: 753' Quadrangle: Milton WV 7.5'

District: Union County: Cabell
Latitude: 11032 Feet South of 38 Deg. 30 Min. 00 Sec.
Longitude 1032 Feet West of 82 Deg. 12 Min. 30 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road				
Charleston WV, 25312				
Agent: Marc Scholl	13 3/8"	34	34	N/A
Inspector: Ralph Triplett	9 5/8"	545	545	288 ft3 CTS
Date Permit Issued: 9/29/11	7"	2368	2368	518 ft3 CTS
Date Well Work Commenced: 11/28/11	4.5"	6700	6700	130 CuFt
Date Well Work Completed: 12/14/11				
Verbal Plugging:	Ran Gamma Log from KOP(2628' – 3568'MD)			
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 6762'TMD, 3363'TVD				
Fresh Water Depth (ft.): 200'				
Salt Water Depth (ft.): 850', 1515'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 3360'MD- 6762 'MD
3206'TVD – 3363' TVD
Gas: Initial open flow odor MCF/d Oil: Initial open flow Bbl/d
Final open flow 1000+ MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure psig (surface pressure) after 72 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

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Signed:
By: President
Date: 3/30/12

Formation:	Top:	Bottom:
Soil, Sand, and Shale	0	223
Sand	223	298
Sand/Shale	298	1408
Salt Sand	1408	1518
Lime	1518	1658
Injun Sand/Squaw	1658	1838
Shale	1838	2284
Coffee Shale	2284	2294
Berea	2294	2304
Devonian Shale	2304	3363
Lower Huron Section	3160	3363

All formation depths shown As TVD

12/08/11 Run total of 155 jts of R-3 4.5" 11.6ppf casing N-80 casing to depth of 6700' KB. Run total of 16 mechanical set Packers Plus formation packers for a 15 stage completion. RU DSA and 10k flanged valve. MIRU Baker Cmt Crew at 6:45pm. Dropped 5bbl water with 2 balls for toe sub and follow with N2. Pressure up with N2 and set packers, open toe sub at 3718psi. Perform annular squeeze on top packer with 100sx mixed at 15ppg.

	Sleeve Size (FP)	Sleeve Depth	Packers
Stage 1	GS/POFC	6698.27	6519.99
Stage 2	1.250	6427.82	6297.38
Stage 3	1.500	6205.22	6074.73
Stage 4	1.625	5982.58	5852.09
Stage 5	1.750	5759.82	5629.28
Stage 6	1.875	5537.11	5406.77
Stage 7	2.000	5314.68	5184.39
Stage 8	2.125	5092.30	4961.96
Stage 9	2.375	4869.73	4739.14
Stage 10	2.500	4646.83	45616.39
Stage 11	2.750	4424.22	4293.68
Stage 12	2.875	4201.38	4070.84
Stage 13	3.125	3978.70	3848.21
Stage 14	3.250	3755.98	3625.34
Stage 15	3.500	3533.12	3360.88
			2681.39

12/12 /11 - **12/14/11** MIRU Baker Stim crew. Start pumping N2 on Stg1. Work rate to 100kscf/min and pump total of 1MMscf N2. Shut down and drop ball for stage 2. Pump ball to sleeve with low rate N2. Open sleeve and increase rate. Pump total of 1MMscf N2. Drop ball for stage 3. Repeat process for stages 3-15.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7	Stg 8
Max P	5460	5089	4688	4672	5217	5261	5028	4908
Avg P	3995	4874	4629	4615	5108	5193	5005	4888
Max R	98.8	105.9	104.0	105.9	110.0	105.3	102.8	101.4
Avg R	96.5	103.1	103.7	104.9	105.0	103.6	101.4	100.7
5 min	1100	1126	1229	1274	1597	2497	2660	2651

	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14	Stg 15
Max P	4721	4531	4538	4677	4609	4419	3586
Avg P	4624	4512	4510	4632	4471	4298	3571
Max R	106.5	103.2	103.5	106.1	109.8	109.0	104.9
Avg R	104.5	102.3	103.3	105.1	106.8	106.6	103.8
5 min	1683	1585	1460	1642	1540	1390	1160

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Date: August 24,2012
API#: 47-013-04737

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Farm Name: Donald Poe Gunn Operator Well No.: Gainer #2

LOCATION: Elevation: 1140' Quadrangle: Millstone

District: Sherman County: Calhoun
Latitude: 825 Feet South of 38 Deg. 50 Min. 0 Sec.
Longitude: 6600 Feet West of 81 Deg. 5 Min. 0 Sec.

Company: Rogers and Son

		Casing & Tubing	Used in Drilling	Left in well	Cement fill up Cu. Ft.
Address:	**12435 S. Calhoun Hwy.**				
	Arnoldsburg, WV 25234	**9 5/8"**	**410'**	**410'**	**150 sacks**
Agent:	**Michael Rogers**				**to surface**
Inspector:	**Ed Gainer**				
Date Permit Issued:	**7/5/2011**	**7"**	**2405'**	**2405'**	**200 sacks**
Date Well Work Commenced:	**8/22/2011**				
Date Well Work Completed:	**9/30/2011**				
Verbal Plugging:		**4 1/2"**		**5272'**	**145 sacks**
Date Permission Granted on:					
Rotary XXX	**Cable** **Rig**				
Total Depth (feet):	**5300**				
Fresh Water Depth (ft.):	**N/A**				
Salt Water Depth (ft.):	**1840**				
	small amount				
Is coal being mined in area (N/Y)?	**N**				
Coal Depths (ft.):	**N/A XXXXXXXX**				

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OPEN FLOW DATA Upper Elk comingled
Producing formation Alexander, Benson, Riley, Balltown, Speechly Pay Zone depth (ft) 2642'-5271"
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 320 MCF/d Oil: Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 890 psig (surface pressure) after 48 Hours

Second producing formation ____ Pay zone depth (ft ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Michael Rogers
By: Michael Rogers
Date: August 28, 2012

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Stage #1 : 90 Quality Foam, 20 perfs 4812-5271',92bbl H2O,no acid(in hole from cement job)26300lbs 20-40 sand,405844 SCF/N2
Stage #2 : 90 Quality Foam ,20 perfs 4006-4632',120bblH2O,500gal, 15%HCL acid, 30600lb,20-40 sand 798095 SCF/N2
Stage #3 : 90 Quality Foam,20 perfs, 3302-3915,101bblH2O, 500gal 15% HCL acid, 30300lb,20-40 sand,552825 SCF/N2
Stage #4 : 90 Quality Foam,20 perfs, 2642-3158,110 bbl H2O,500 gal 15%HCL acid, 30500lb 20-40 sand, 548051 SCF/N2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
dirt		soft	0	20	
sand		hard	20	450	
red rock		med	450	1180	
sand & shale		med	1180	1620	
salt sand		hard	1620	1700	small amount of oil & H2O
sand & shale		med	1700	1882	
maxon		hard	1882	1960	
big lime and keener		hard	1960	2280	
big injun		soft	2280	2328	show of gas & oil
sand & shale		med	2328	2750	
berea			2750	2760	
sand & shale stringers		med	2760	2904	
riley		soft	2904	2914	
sand & shale stringers		med	2914	4130	
benson		med	4130	4150	
sand & shale		med	4150	4810	
alexandra		med	4810	4822	
sand & shale		med	4822	5052	
upper elk		med	5052	5098	
sand & shale		med	5098	5300	TD

ROGERS AND SON
Well Operator

By: Michael Rogers

Date : August 28, 2012

WR-35

August 28, 2012

API **# 47 - 017- 06108**

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Bartlett** Operator Well No. : **One (1)**

LOCATION: Elevation: **1128** Quadrangle: **New Milton 7.5**
District: **New Milton** County: **Doddridge**
Latitude: **39.23067** Feet South of **39** Deg. **13** Min. **50.4** Sec.
Longitude: **80.671056** Feet West of **80** Deg. **42** Min. **38** Sec.

Company: **KEY OIL COMPANY**
22 GARTON PLAZA
WESTON, WV 26452

Agent: **Jan E. Chapman**
Inspector: **Dave Scranage**
Permit Issued: **03-19-12**
Well Work Commenced: **08-08-12**
Well Work Completed: **08-13-12**
Verbal Plugging **N/A**
Permission granted on: **05-12-12**
Rotary **X** Cable Rig
Total Depth (feet) **2940'**
Fresh water depths (ft) **92'**
Salt water depths (ft) **1218'**
Is coal being mined in area (Y / N)? **No**
Coal Depths (ft): **NA**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	**32'**	**Pulled**	**N/A**
9-5/8"	**168'**	**168'**	**90 sks. CTS**
7"	**1100'**	**1100'**	**180 sks. CTS**
4-1/2"	**2886'**	**2886'**	**150 sks. ETOC 1200'**

OPEN FLOW DATA **Gordon & Gordon Stray** **2696-2854**
Gantz **2480-2486**
Weir **2273-2338**
Keener & Injun **2062-2110**
Producing formation **Blue Monday** Pay zone depth (ft) **1984-1992**
Gas: Initial open flow **97** MCF / D Oil: Initial open flow **Show** Bbl / D
Final open flow **1463** MCF / D Oil: Final open flow **2** Bbl / D
Time of open flow between initial and final tests **24** Hours
Static rock **300** pressure psig (surface pressure) after **24** Hours
All Formations Comingled.
Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF / D Oil: Initial open flow Bbl / D
Final open flow MCF / D Oil: Final open flow Bbl / D
Time of open flow between initial and final tests Hours
Static rock pressure psig (surface pressure) after Hours

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For: KEY OIL COMPANY
By: Jan Chapman PRESIDENT
Date: **August 28, 2012**

Bartlett #1 (47-017-06108)

TREATMENT:

Gordon & Gordon Stray	(20 holes) 2696-2854	sand, water and N2: 30,100# 20/40 sand, 329,000 SCF N2, and 186 bbl. water
Gantz	(20 holes) 2480-2486	sand, water and N2: 20,000# 20/40 sand, 254,000 SCF N2, and 138 bbl. water
Weir	(20 holes) 2273-2338	sand, water and N2: 20,000# 20/40 sand, 246,000 SCF N2, and 140 bbl. water
Injun & Keener	(20 holes) 2062-2110	sand, water and N2: 27,500# 20/40 sand, 430,000 SCF N2, and 219 bbl. water
Blue Monday	(20 holes) 1984-1992	sand, water and N2: 28,500# 20/40 sand, 310,000 SCF N2, and 186 bbl. water

FORMATIONS:

Sand & Shale	0'	1250'
Salt Sand	1250'	1310'
Sand & Shale	1310'	1880'
Little Lime	1880'	1980'
Blue Monday	1980'	2000'
Shale	2000'	2060'
Keener	2060'	2090'
Injun	2090'	2130'
Sand & Shale	2130'	2280'
Weir	2280'	2360'
Shale	2360'	2480'
Gantz	2480'	2490'
Shale	2490'	2690'
Gordon	2690'	2710'
Shale	2710'	2940'
TD		2940'

WR-35

August 29, 2012

API # 47 - 017- 06122

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: **Vada Barnett** Operator Well No. : **One (1)**

LOCATION: Elevation: **1149** Quadrangle: **Oxford 7.5**
District: **New Milton** County: **Doddridge**
Latitude: **39.18648** Feet South of **39** Deg. **11** Min. **11.3** Sec.
Longitude: **80.75140** Feet West of **80** Deg. **45** Min. **05.0** Sec.

Company: **KEY OIL COMPANY**
22 GARTON PLAZA
WESTON, WV 26452

Agent: **Jan E. Chapman**
Inspector: **Dave Scranage**
Permit Issued: **06-11-12**
Well Work Commenced: **08-14-12**
Well Work Completed: **08-19-12**
Verbal Plugging **N/A**
Permission granted on: **05-12-12**
Rotary **X** Cable Rig
Total Depth (feet) **3042'**
Fresh water depths (ft) **115'**
Salt water depths (ft) **1400'**
Is coal being mined in area (Y / N)? **No**
Coal Depths (ft): **NA**

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu Ft
11"	**32'**	**Pulled**	**N/A**
9-5/8"	**168'**	**168'**	**70 sks. CTS**
7"	**1314'**	**1314'**	**180 sks. CTS**
4-1/2"	**2933'**	**2933'**	**160 sks. ETOC 1200'**

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WV Department of Environmental Protection

OPEN FLOW DATA **Gordon & Gantz** **2542-2776**
Weir **2348-2418**
Injun **2194-2200**
Keener **2126-2132**
Producing formation **Blue Monday** Pay zone depth (ft) **2056-2062**
Gas: Initial open flow **103** MCF / D Oil: Initial open flow **Show** Bbl / D
Final open flow **712** MCF / D Oil: Final open flow **Show** Bbl / D
Time of open flow between initial and final tests **24** Hours
Static rock **675** pressure psig (surface pressure) after **24** Hours
All Formations Comingled.
Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF / D Oil: Initial open flow Bbl / D
Final open flow MCF / D Oil: Final open flow Bbl / D
Time of open flow between initial and final tests Hours
Static rock pressure psig (surface pressure) after Hours

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For: KEY OIL COMPANY
By: Jan Chapman PRESIDENT
Date: **August 29, 2012**

Vada Barnett #1 (47-017-06122)

TREATMENT:

Gordon & Gantz	(20 holes) 2542-2776	sand, water and N2: 30,000# 20/40 sand, 303,000 SCF N2, and 176 bbl. water
Weir	(20 holes) 2348-2418	sand, water and N2: 14,000# 20/40 sand, 250,000 SCF N2, and 126 bbl. water
Injun	(20 holes) 2194-2200	sand, water and N2: 25,000# 20/40 sand, 264,000 SCF N2, and 157 bbl. water
Keener	(20 holes) 2126-2132	sand, water and N2: 25,000# 20/40 sand, 267,000 SCF N2, and 163 bbl. water
Blue Monday	(20 holes) 2056-2062	sand, water and N2: 28,500# 20/40 sand, 257,000 SCF N2, and 181 bbl. water

FORMATIONS:

Sand & Shale	0'	1300'
Salt Sand	1300'	1400'
Shale	1400'	1600'
Sand & Shale	1600'	1840'
Shale	1840'	2040'
Blue Monday	2040'	2070'
Lime	2070'	2100'
Keener	2100'	2140'
Injun	2140'	2200'
Sand & Shale	2200'	2340'
Weir	2340'	2430'
Shale	2430'	2540'
Gantz	2540'	2550'
Shale	2550'	2770'
Gordon	2770'	2780'
Shale	2780'	3040'
TD		3040'

WR-35
Rev (5-01)

DATE: 08-06-2012
API # 47-021-05744

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: National Timber Partners WV 3 LLC. Operator Well No.: Withers # 1-U

LOCATION: Elevation: 1282' Quadrangle: Gilmer 7.5

District: Glenville County: Gilmer
Latitude: 13,100' Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 3,000' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: **Horizon Energy Corporation**	**Casing & Tubing**	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address:				
Sand Fork Rd. Box 111 Sand Fork, WV 26430				
Agent: Robert R. Jones II				
Inspector: Joe McCourt	9 5/8	631	631	280 sks
Date Permit Issued: 05/23/2012				
Date Well Work Commenced: 07-23-2012	6 5/8	714	714	150 sks
Date Well Work Completed: 07-28-2012				
Verbal Plugging:	4 1/2	3341	3273	85 sks
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 3341				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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SEP 04 2012
WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation 5th Sand Pay zone depth (ft) 3163-3173 ft.
Gas: Initial open odor MCF/d Oil: Initial open flow ___show__ Bbl/d
Final open flow 210 MCF/d Final open flow ___6_____ Bbl/d
Time of open flow between initial and final tests____8_____Hours
Static rock Pressure 610# psig (surface pressure) after 48 Hours

Second producing formation Pay zone depth (ft) ft.
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

* = commingled zones

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Signed: _____
By: ROBERT R. JONES II, PRESIDENT
Date: 8-30-2012

Withers #1-U
47-021-05744
08-06-2012

Stage # 1	perfs	sand	avg rate	isip
5th Sand	3163-3173	510 sks	27.0 bpm	# 1100

Drillers Log

Clay	0	10	
Sd/sh	10	30	
Sd/sh	30	576	
Sd/Sh	576	2258	
LL	2258	2272	
Sd/Sh	2272	2316	
Bl	2316	2360	gas ck @ 2518 = odor
Injun	2360	2505	gas ck @ 2606 = odor
Sd/Sh	2505	3156	gas ck @ 3009 = odor
5th Sand	3156	3168	
Sd/Sh	3168	3341	
Td	3341 ft.		gas ck @ td =oil / gas odor

Electric Log Tops

Big Lime	2316
5th Sand	3156

WR-35
Rev (5-01)

DATE: 08-09-2012
API # 47-021-05745

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: National Timber Partners WV 3 LLC. Operator Well No.: Withers # 1-V

LOCATION: Elevation: 1274' Quadrangle: Gilmer 7.5

District: Glenville County: Gilmer
Latitude: 12,350' Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 5,480' Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Horizon Energy Corporation	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address:				
Sand Fork Rd. Box 111 Sand Fork, WV 26430				
Agent: Robert R. Jones II				
Inspector: Joe McCourt	9 5/8	631	631	220 sks
Date Permit Issued: 05/23/2012				
Date Well Work Commenced: 07-31-2012	6 5/8	747	747	150 sks
Date Well Work Completed: 08-05-2012				
Verbal Plugging:	4 1/2	3319	3272	85 sks
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 3319				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation 5th Sand Pay zone depth (ft) 3147-3158 ft.
Gas: Initial open odor MCF/d Oil: Initial open flow ___show__ Bbl/d
Final open flow 310 MCF/d Final open flow ____7____ Bbl/d
Time of open flow between initial and final tests ___8_____ Hours
Static rock Pressure 580# psig (surface pressure) after 48 Hours

Second producing formation Injun Pay zone depth (ft) 2495-2503 ft.
Gas: Initial open flow_____MCF/d Oil: Initial open flow_____Bbl/d
Final open flow_____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests_____Hours
Static rock Pressure_____psig (surface pressure) after _____Hours

* = commingled zones

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

Signed: _____
By: ROBERT R. JONES II, PRESIDENT
Date: 8-30-2012

Withers #1-V
47-021-05745
08-09-2012

Stage # 1	perfs	sand	avg rate	isip
5th Sand	3147-3158	500 sks	26.2 bpm	# 1813
Stage # 2				
Injun	2495-2503	350 sks	27.5 bpm	# 1383

Drillers Log

Clay	0	10	
Sd/sh	10	30	
Sd/sh	30	561	
Sd/Sh	561	2248	
LL	2248	2262	
Sd/Sh	2262	2310	
Bl	2310	2481	gas ck @ 2242 = odor
Injun	2481	2500	gas ck @ 2515 = odor
Sd/Sh	2500	3143	gas ck @ 2918 = odor
5th Sand	3143	3156	
Sd/Sh	3156	3319	
Td	3319 ft.		gas ck @ td =oil / gas odor

Electric Log Tops

Big Lime	2310
5th Sand	3143

WR-35
Rev (5-01)

DATE: 3/30/12
API # : 47-035-02999

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Dwight & Lori Anderson Operator Well No.: HR 456

LOCATION: Elevation: 644' Quadrangle: Liverpool WV 7.5'

District: Ravenswood County: Jackson
Latitude: 9964 Feet South of 38 Deg. 57 Min. 30 Sec.
Longitude 3693 Feet West of 81 Deg. 35 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	25	25	N/A
Agent: Marc Scholl	13 3/8"	84	84	135ft3 CTS
Inspector: Jamie Stevens	9 5/8"	603	603	300 ft3 CTS
Date Permit Issued: 8/30/11	7"	2374	2374	516 ft3 CTS
Date Well Work Commenced: 1/12/12	4.5"	7231	7231	130 ft3
Date Well Work Completed: 1/31/12				
Verbal Plugging:	Ran Gamma Log from KOP(3439' – 4093'TVD)			
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 7312'TMD, 4112'TVD				
Fresh Water Depth (ft.): 40'				
Salt Water Depth (ft.): 1074', 1683'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4035'MD- 7312 'MD
3963'TVD – 4112' TVD
Gas: Initial open flow trace MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1500+ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1645
Salt Sand	1645	1850
Lime	1850	1890
Injun	1890	1935
Shale	1935	2310
Coffee Shale	2310	2330
Devonian Shale	2330	4112
Lower Huron Section	4020	4112

All depths shown As TVD

01/23/12. Run total of 168jts of R-3 4.5" 11.6ppf N80 casing to depth of 7231'. Run a 14 stg Packers Plus completion system. ND BOP and flange up 10k valve. RU Baker cmt crew and start pumping N2 with toe sub balls and pressure casing up to 3000psi. Shut down and hold pressure for 15 – 20 min. Start pumping N2 and pressure up to 3450psi to open shoe. Pumped total of 128k scf N2. RD N2 equipment and RU to 4X7 annulus. Dump squeeze with 100sx mixed at 15ppg. Follow cmt with 3bbl water.

	Sleeve	Sleeve Size	Packers
Stage 1	P/O Shoe	N/A	7058
Stage 2	6924	1.375	6835
Stage 3	6701	1.625	6613
Stage 4	6520	1.750	6390
Stage 5	6297	1.875	6167
Stage 6	6074	2.000	5902
Stage 7	5768	2.125	5679
Stage 8	5545	2.375	5456
Stage 9	5364	2.500	5233
Stage 10	5099	2.750	4968
Stage 11	4834	2.875	4745
Stage 12	4611	3.125	4523
Stage 13	4389	3.250	4258
Stage 14	4166	3.500	4035
Anchor			2687

01/30/12 - 1/31/12 MIRU Baker Stim crew. Start pumping half rate and work rate up to 101k scf/min as pressure allowed. Pump total of 1MM scf N2. Drop ball for **Stg 2** and wait 10 min. Start pumping at 20k scf/min, and land ball and open sleeve at 4762psi. Up rate and pump total of 1MM scf N2. Shut down and drop ball for **Stg 3.** Wait 10min. Repeat process for Stgs 3- 14.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7
Max P	5972	5893	6096	5579	5652	5357	5193
Avg P	5658	5802	5902	5524	5545	5310	5162
Max R	102.8	103.4	102.4	108.0	112.0	111.3	106.0
Avg R	97.2	101.9	86.8	106.0	109.0	109.9	105.0
5 min	2180	2247	N/A	N/A	2275	2254	2298

	Stg 8	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14
Max P	5192	4877	4717	4508	4704	4317	3967
Avg P	5149	4838	4681	4415	4672	4277	3945
Max R	111.9	108.0	105.0	107.0	108.0	107.0	104.0
Avg R	109.0	106	104.0	104.0	106.0	105.0	103.0
5 min	2295	N/A	2064	1936	2007	1861	1855

WR-35
Rev (5-01)

DATE: 08-16-2012
API # 47-041-05652

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Coastal Timber Lands Co. Operator Well No.: Butcher # 4

LOCATION: Elevation: 826' Quadrangle: Gilmer 7.5

District: Court House County: Lewis
Latitude: 3,000' Feet South of 38 Deg. 57 Min. 30 Sec.
Longitude 6,800' Feet West of 80 Deg. 37 Min. 30 Sec.

Company: Horizon Energy Corporation	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address:				
Sand Fork Rd. Box 111 Sand Fork, WV 26430				
Agent: Robert R. Jones II				
Inspector: Joe McCourt	9 5/8	168	168	100 sks
Date Permit Issued: 06-13-2011				
Date Well Work Commenced: 08-07-2012	6 5/8	840	840	145 sks
Date Well Work Completed: 08-12-2012				
Verbal Plugging:	4 1/2	2855	2654	85 sks
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 2855				
Fresh Water Depth (ft.): N/A				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

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SEP 04 2012
WV Department of
Environmental Protection

OPEN FLOW DATA

Producing formation Gordan Sand Pay zone depth (ft) 2549-2553 ft.
Gas: Initial open odor MCF/d Oil: Initial open flow show Bbl/d
Final open flow 300 MCF/d Final open flow 5 Bbl/d
Time of open flow between initial and final tests 8 Hours
Static rock Pressure 450# psig (surface pressure) after 48 Hours

Second producing formation Injun Pay zone depth (ft) 2038-2053 ft.
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

* = commingled zones

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,

Signed: _____
By: ROBERT R. JONES II, PRESIDENT
Date: 8-30-2012

Butcher # 4
47-041-05652
08-16-2012

Stage # 1	perfs	sand	avg rate	isip
Gordan	2549-2553	354 sks	27.1 bpm	# 2411
Stage # 2				
Injun	2038-2053	503 sks	26.7 bpm	# 1279

Drillers Log

Clay	0	10	
Sd/sh	10	30	
Sd/sh	30	840	
Sd/Sh	840	1824	
LL	1824	1835	
Sd/Sh	1835	1870	
Bl	1870	2034	gas ck @ 2142 = odor
Injun	2034	2054	gas ck @ 2514 = odor
Sd/Sh	2054	2544	gas ck @ 2823 = odor
Gordan	2544	2554	
Sd/Sh	2554	2855	
Td	2855 ft.		gas ck @ td =oil / gas odor

Electric Log Tops

Big Lime	1870
Gordan	2544

WR-35
Rev (5-01)

DATE: 9/25/2007
API # : 47-6101550

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Huskie Lumber Company **Operator Well No.: SC-2**

LOCATION: Elevation: 1414' **Quadrangle: Hundred**

District: Battelle **County: Monongalia**
Latitude: 39 Feet South of 40' Deg. 00" Min. Sec.
Longitude: 80 Feet West of 22' Deg. 30" Min. Sec.
Company: CNX Gas Company, LLC

	Casing & Tubing	Used in drilling	Left in well	Cement Fill Up (# of Sacks)
Address: 2481 John Nash BLVD	13 3/8"	42'	42'	Sanded In
Bluefield,WV 24701	9 5/8"	399'	399'	140sks
Agent: Les Arrington	7"	1480'	1480'	145 sks
Inspector: Bill Hatfield				
Date Permit Issued: July 26,2007				
Date Well Work Commenced: 8/16/2007				
Date Well Work Completed: 8/31/2007				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Depth (feet): 2026'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? Y				

Coal Depths (ft.): 837'1144'1242'

OPEN FLOW DATA
Producing formation **Pittsburgh Coal** depth (ft) 1242'
Gas: Initial open flow **N/A** MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A Hours

Second producing formation Upper Freeport Coal Pay zone depth (ft) 1750'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Gas Well DOE MH-13 (API No. 47-6101550) is a horizontal well for CNX Gas Company, LLC. Refer to the attached information for additional information.

Signed: Geoff Fanning
By: Geoff Fanning Drilling Manager
Date: 9/25/2007

St. Cloud CBM Well No.SC2 PG Drill Log

API# 47-6101550

Description	Depth	
Fill	0-10'	
Shale	10-25'	
Sand	25'-30'	
Shale	30'-40'	
Sand	40'-50'	
Red Rock	50'-60'	
Sand	60'-90'	
Shale	90'-185'	
Sand	185'-250'	
Shale	250'-310'	
Sand	310'-340'	
Shale	340'-390'	
Sand	390'-455'	
Shale	455'-510'	
Sand	510'-560'	
Shale	560'-635'	
Sand	635'-670'	
Shale	670'-750'	
Sand	750'-790'	
Shale	790'-870'	
Sand	870'-910	
Shale	910'-965'	
Sand	965'-990'	
Shale	990'-1035'	
Sand	1035'-1070'	
Shale	1070'-1105'	
Sand	1105'-1160'	
Coal	1160'-1165'	
Shale	1165'-1180'	
Sand	1180'-1235'	
Coal	1235'-1243'	
Shale	1243'-1360'	
Sand	1360'-1400'	
Shale	1400'-1470'	TD Of Well

WR-35
Rev (5-01)

DATE: 9/25/2007
API #: 47-6101551

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Huskie Lumber Company Operator Well No.: SC-2 A

LOCATION: Elevation: 1409' Quadrangle: Hundred

District: Battelle County: Monongalia
Latitude: 39 Feet South of 40' Deg. 00" Min. ____ Sec.
Longitude: 80 Feet West of 22' Deg. 30" Min. ____ Sec.
Company: CNX Gas Company, LLC

	Casing & Tubing	Used in drilling	Left in well	Cement Fill Up (# of Sacks)
Address: 2481 John Nash BLVD	9 5/8"	42'	42'	Sanded In
Bluefield,WV 24701	7"	974.6	974.6	145 sks
Agent: Les Arrington				
Inspector: Bill Hatfield				
Date Permit Issued: July 26,2007				
Date Well Work Commenced: 8/16/2007				
Date Well Work Completed: 8/31/2007				
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary Cable Rig				
Total Depth (feet): 2026'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? Y				

Coal Depths (ft.): 837'1144'1242'

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Office of Oil & Gas
SEP 04 2007
WV Department of
Environmental Protection

OPEN FLOW DATA
Producing formation Pittsburgh Coal depth (ft) 1242'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A Hours

Second producing formation Upper Freeport Coal Pay zone depth (ft) 1750'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Gas Well DOE MH-13 (API No. 47-6101551) is a horizontal well for CNX Gas Company, LLC. Refer to the attached information for additional information.

Signed: Geoff Fanning
By: Geoff Fanning Drilling Manager
Date: 9/25/2007

St. Cloud CBM Well No.SC2 Access PG Drill Log

API# 47-6101551

Description	Depth
Fill	0-10'
Shale	10-25'
Sand	25'-30'
Shale	30'-40'
Sand	40'-50'
Red Rock	50'-60'
Sand	60'-90'
Shale	90'-185'
Sand	185'-250'
Shale	250'-310'
Sand	310'-340'
Shale	340'-390'
Sand	390'-455'
Shale	455'-510'
Sand	510'-560'
Shale	560'-635'
Sand	635'-670'
Shale	670'-750'
Sand	750'-790'
Shale	790'-870'
Sand	870'-910
Shale	910'-965'
Sand	965'-990'
Shale	990'-1035'
Sand	1035'-1070'
Shale	1070'-1105'
Sand	1105'-1160'
Coal	1160'-1165'
Shale	1165'-1180'
Sand	1180'-1235'
Coal	1235'-1243'

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-31-2012
API #: 47-061-01621

Farm name: Reliance Minerals Inc Mon Operator Well No.: 3H (833041)

LOCATION: Elevation: 1321' Quadrangle: Morgantown South

District: Clinton County: Monongalia
Latitude: 5123' Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 6483' Feet West of 79 Deg. 57 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	13 3/8"	529'	529'	559 cf
Agent: Eric Gillespie	9 5/8"	3082'	3082'	1325 cf
Inspector: Sam Ward	5 1/2"	15615	15615'	3783 cf
Date Permit Issued: 2/14/2011				
Date Well Work Commenced: 5/2/2011				
Date Well Work Completed: 7/29/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7567'				
Total Measured Depth (ft): 15620'				
Fresh Water Depth (ft.): 400'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 161'				
Void(s) encountered (N/Y) Depth(s) N				

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MAR 30 2012
WV Department of Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,666'-15,493'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 2,708 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 4,919 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-29-2012
Date

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list none

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 15,523'

Formations Encountered: Top Depth / Bottom Depth

Surface:

(See attached)

FORMATION/LITHOLOGY	TOP DEPTH (ft)	BOTTOM DEPTH (ft)
SS and Sltst	0	161
Pittsburgh Coal	161	171
Shale and Sltst w/ minor SS	171	560
Shale and SS	560	980
LS and Shale	980	1154
Big Injun	1154	1430
Shale w/ SS and minor Sltst	1430	2720
Sltst w/ minor Shale	2720	2970
Shale w/ minor Sltst	2970	4620
Shale	4620	7038
Geneseo	7038	7067
Tully	7067	7127
Hamilton	7127	7443
Marcellus	7443	15620

PERFORATION RECORD ATTACHMENT

Well Name and Number: Reliance Minerals Inc Mon 3H (833041)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
7/29/2011	15,171	15,493	7/29/2011	15,171	15,493	Slk Wtr	9,492	Sand	340,403	79.0
8/9/2011	14,316	14,698	8/9/2011	14,316	14,698	Slk Wtr	10,737	Sand	579,300	77.0
8/10/2011	13,841	14,223	8/10/2011	13,841	14,223	Slk Wtr	8,049	Sand	568,280	70.0
8/10/2011	13,366	13,748	8/10/2011	13,366	13,748	Slk Wtr	9,789	Sand	453,506	79.0
8/11/2011	12,891	13,273	8/11/2011	12,891	13,273	Slk Wtr	10,747	Sand	570,274	69.0
8/11/2011	12,416	12,798	8/11/2011	12,416	12,798	Slk Wtr	13,885	Sand	573,360	72.0
8/12/2011	11,947	12,323	8/12/2011	11,947	12,323	Slk Wtr	12,781	Sand	570,020	74.0
8/12/2011	11,466	11,848	8/12/2011	11,466	11,848	Slk Wtr	13,573	Sand	572,220	74.0
8/13/2011	10,991	11,367	8/13/2011	10,991	11,367	Slk Wtr	11,593	Sand	570,080	72.0
8/13/2011	10,516	10,898	8/13/2011	10,516	10,898	Slk Wtr	9,504	Sand	570,700	72.0
8/13/2011	10,048	10,423	8/13/2011	10,048	10,423	Slk Wtr	9,846	Sand	576,860	77.0
8/14/2011	9,562	9,948	8/14/2011	9,562	9,948	Slk Wtr	16,315	Sand	572,520	68.0
8/15/2011	9,091	9,473	8/15/2011	9,091	9,473	Slk Wtr	10,250	Sand	570,620	73.0
8/15/2011	8,616	9,000	8/15/2011	8,616	9,000	Slk Wtr	10,082	Sand	570,180	75.0
8/16/2011	8,141	8,523	8/16/2011	8,141	8,523	Slk Wtr	9,436	Sand	571,780	74.0
8/16/2011	7,666	8,048	8/16/2011	7,666	8,048	Slk Wtr	9,194	Sand	578,300	77.0

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-31-2012
API #: 47-061-01614

Farm name: Reliance Minerals Operator Well No.: 8H (832598)

LOCATION: Elevation: 1321' Quadrangle: Morgantown South

District: Clinton County: Monongalia
Latitude: 5106' Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 11861' Feet West of 79 Deg. 57 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	13 3/8"	525'	525'	590 cf
Agent: Eric Gillespie	9 5/8"	2986'	2986'	1373 cf
Inspector: Tristan Jenkins	5 1/2"	15029'	15029'	3804 cf
Date Permit Issued: 12/10/2010				
Date Well Work Commenced: 4/2/2011				
Date Well Work Completed: 7/30/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,261'				
Total Measured Depth (ft): 15,037'				
Fresh Water Depth (ft.): 400'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 161'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,798'-14,894'
Gas: Initial open flow 1,844 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 4,720 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-29-2012
Date

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, NEUTRON, DENSITY
INDUCTION, SONIC SCANNER, FMI

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 14,939'

Formations Encountered: Top Depth / Bottom Depth
Surface:

(See Attached)

FORMATION/LITHOLOGY	TOP DEPTH (ft)	BOTTOM DEPTH (ft)
SS and Sltst	0	161
Pittsburgh Coal	161	171
SS and Sltst	171	240
Shale and minor Coal	240	300
Shale and SS w/ minor Sltst	300	680
Shale	680	760
SS and minor Shale	760	980
LS and SS	980	1144
Big Injun	1144	1440
SS and minor Shale	1440	1500
Shale and minor SS	1500	2060
SS, Shale, and minor Sltst	2060	2850
Shale w/ minor Sltst	2850	7021
Geneseo	7021	7070
Tully	7070	7156
Hamilton	7156	7440
Marcellus	7440	15105

PERFORATION RECORD ATTACHMENT

61-1614

Well Name and Number: Reliance Minerals 8H (832598)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
7/30/2011	14,572	14,894	7/30/2011	14,572	14,894	Slk Wtr	7,841	Sand	409,680	83.0
7/31/2011	14,100	14,479	7/31/2011	14,100	14,479	Slk Wtr	13,505	Sand	574,340	80.0
7/31/2011	13,622	14,004	7/31/2011	13,622	14,004	Slk Wtr	12,645	Sand	576,240	86.0
8/1/2011	13,147	13,529	8/1/2011	13,147	13,529	Slk Wtr	10,267	Sand	576,280	86.0
8/1/2011	12,667	13,054	8/1/2011	12,667	13,054	Slk Wtr	9,912	Sand	570,640	84.0
8/2/2011	12,073	12,455	8/2/2011	12,073	12,455	Slk Wtr	9,456	Sand	578,980	88.0
8/4/2011	11,598	11,980	8/4/2011	11,598	11,980	Slk Wtr	9,670	Sand	577,100	86.0
8/4/2011	11,123	11,505	8/4/2011	11,123	11,505	Slk Wtr	10,897	Sand	568,180	84.0
8/5/2011	10,655	11,030	8/5/2011	10,655	11,030	Slk Wtr	9,352	Sand	578,760	83.0
8/5/2011	10,173	10,555	8/5/2011	10,173	10,555	Slk Wtr	9,827	Sand	578,660	86.0
8/5/2011	9,698	10,080	8/5/2011	9,698	10,080	Slk Wtr	9,717	Sand	571,400	84.0
8/6/2011	9,223	9,605	8/6/2011	9,223	9,605	Slk Wtr	10,021	Sand	576,580	86.0
8/6/2011	8,748	9,130	8/6/2011	8,748	9,130	Slk Wtr	10,191	Sand	571,140	85.0
8/7/2011	8,273	8,655	8/7/2011	8,273	8,655	Slk Wtr	10,904	Sand	571,580	82.0
8/7/2011	7,798	8,180	8/7/2011	7,798	8,180	Slk Wtr	9,656	Sand	573,340	86.0

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-30-2012
API #: 47-069-00071

Farm name: Brian Dytko Operator Well No.: 8H (832975)

LOCATION: Elevation: 1245' Quadrangle: Valley Grove WV

District: Triadelphia County: Ohio
Latitude: 6900' Feet South of 40 Deg. 02 Min. 30 Sec.
Longitude 4270' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	Driven
Agent: Eric Gillespie	13 3/8"	684'	684'	743 cf
Inspector: Bill Hendershot	9 5/8"	2151'	2151'	958 cf
Date Permit Issued: 1-6-2011	5 1/2"	13989'	13989'	3577 cf
Date Well Work Commenced: 3-16-2011				
Date Well Work Completed: 11-22-2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,428'				
Total Measured Depth (ft): 14,000'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): 1000'				
Is coal being mined in area (N/Y)? Yes				
Coal Depths (ft.): 632'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 6,817'-13,849'
Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 4178 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-29-2012
Date

Were core samples taken? Yes_____ No N Were cuttings caught during drilling? Yes Y No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-6402' MD; LWD GR from 5485-14000' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 13,895'

Formations Encountered: Top Depth / Bottom Depth
Surface:

(See Attached)

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SS/LS	0	520
LS/SS	520	632
Pittsburg Coal	632	637
LS/SS	637	680
SS/SHALE	680	900
Big Lime	900	1110
Big Injun	1110	1300
SHALE	1300	2950
SHALE/LS	2950	3100
SHALE	3100	6220
Geneseo	6220	6250
Tully	6250	6450
Hamilton	6450	6603
Marcellus	6603	14000

PERFORATION RECORD ATTACHMENT

Well Name and Number: Brian Dytko 8H (832975)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
11/14/2011	13,467	13,849	11/14/2011	13,467	13,849	Slk Wtr	9,370	Sand	570,286	86
11/15/2011	12,992	13,374	11/15/2011	12,992	13,374	Slk Wtr	9,849	Sand	572,330	85
11/15/2011	12,517	12,894	11/15/2011	12,517	12,894	Slk Wtr	10,469	Sand	571,037	85
11/16/2011	12,042	12,424	11/16/2011	12,042	12,424	Slk Wtr	9,930	Sand	570,518	87
11/16/2011	11,570	11,949	11/16/2011	11,570	11,949	Slk Wtr	9,729	Sand	569,527	88
11/16/2011	11,092	11,472	11/16/2011	11,092	11,472	Slk Wtr	11,628	Sand	569,820	75
11/17/2011	10,617	10,999	11/17/2011	10,617	10,999	Slk Wtr	9,882	Sand	568,728	86
11/18/2011	10,138	10,524	11/18/2011	10,138	10,524	Slk Wtr	11,344	Sand	576,475	85
11/19/2011	9,667	10,049	11/19/2011	9,667	10,049	Slk Wtr	10,768	Sand	570,048	85
11/19/2011	9,192	9,574	11/19/2011	9,192	9,574	Slk Wtr	9,934	Sand	571,539	83
11/19/2011	8,717	9,099	11/19/2011	8,717	9,099	Slk Wtr	10,182	Sand	572,610	85
11/20/2011	8,242	8,624	11/20/2011	8,242	8,624	Slk Wtr	9,460	Sand	570,741	85
11/20/2011	7,767	8,149	11/20/2011	7,767	8,149	Slk Wtr	10,314	Sand	571,955	85
11/21/2011	7,292	7,674	11/21/2011	7,292	7,674	Slk Wtr	9,553	Sand	572,137	84
11/21/2011	6,817	7,199	11/21/2011	6,817	7,199	Slk Wtr	9,224	Sand	549,715	87

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 7/23/2012
API #: 47-77-00426

Farm name: Jenkins, Mary Joan Operator Well No.: Husker 1-OB

LOCATION: Elevation: 1962' Quadrangle: Cuzzart

District: Pleasant County: Preston
Latitude: 5110 Feet South of 39 Deg. 35 Min. 00 Sec.
Longitude 8620 Feet West of 79 Deg. 35 Min. 00 Sec.

Company: Novus Operating, LLC

Address: 2963 Ruger Drive	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Royse City, TX 75189	20"	50'	50'	Driven
Agent: Charles B. Dollison	Conductor			
Inspector: Bill Hatfield				
Date Permit Issued: 11/13/2008	13-3/8"	229'	218'	CTS
Date Well Work Commenced: 1/29/2009	66# J-55			
Date Well Work Completed: 3/15/2010				
Verbal Plugging: N/A	9-5/8"	2484'	2482'	CTS
Date Permission granted on: N/A	38# J-55			725 sx
Rotary ☒ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 8051.93'	7"	8300'	8298'	650 sx
Total Measured Depth (ft): 8430'	26# HCP110			819 ft³
Fresh Water Depth (ft.): 185'	K Window	cut 7084	4-7092'	
Salt Water Depth (ft.): 1700'				
Is coal being mined in area (N/Y)? N	4-1/2" liner	1594'	1594'	131 sx
Coal Depths (ft.): 85, 149, 200, 345, +400	11.7# P110			
Void(s) encountered (N/Y) Depth(s)	Liner top	at 6804'	shoe at	8430'

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation N/A Pay zone depth (ft) 0
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 0 psig (surface pressure) after 0 Hours

Second producing formation N/A Pay zone depth (ft) 0
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 0 psig (surface pressure) after 0 Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature 7/23/2012 Date

Were core samples taken? Yes ✓ No _____ Were cuttings caught during drilling? Yes ✓ No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR/PEX/AIT/FMI Sonic Scanner

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

No perforated intervals, no hydraulic fracturing, and no stimulation. Waiting on pipeline for completion.

Plug Back Details Including Plug Type and Depth(s): Mill Window 7084 - 7092'

Formations Encountered: Surface:	Top Depth /	Bottom Depth
Burket Shale	7645	7715
Tully Lime	7715	7745
Hamilton Shale	7745	8030
Marcellus	8030	8200
Onondaga	8200	

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 7/23/2012
API #: 47-77-00443H

Farm name: Forman, Karen L. Operator Well No.: Fighting Farmer 2H

LOCATION: Elevation: 1787' Quadrangle: Cuzzart

District: Portland County: Preston
Latitude: 14,450 Feet South of 79 Deg. 35 Min. 00 Sec.
Longitude 8430 Feet West of 39 Deg. 35 Min. 00 Sec.

Company: Nouns Operating, LLC

Address: 2963 Ruger Drive	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Royse City, TX 75189	20" conductor	40'	40'	Driven
Agent: Charles B. Dollison				
Inspector: Bill Hatfield	13-3/8"	414'	414'	CTS
Date Permit Issued: 11/13/2008	36# H40			
Date Well Work Commenced: 2/17/2009				
Date Well Work Completed: 2/24/2010	9-5/8"	2739'	2739'	CTS
Verbal Plugging: N/A				
Date Permission granted on: N/A	5-½"	10,011'	10,011'	1280 ft³
Rotary [X] Cable [ ] Rig [ ]	17# HCP110			
Total Vertical Depth (ft): 7885.62'				
Total Measured Depth (ft): 10,055	Casing Patch		8440'-	
Fresh Water Depth (ft.): 300'	ID= 4.592"		8460'	
Salt Water Depth (ft.): 1700'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 85, 149, 200, 345, +400'				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Lower Marcellus Pay zone depth (ft) 8679 - 9955' MD
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 300 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 3 years ~~Hours~~
Static rock Pressure 3150 psig (surface pressure) after 3 years ~~Hours~~

Second producing formation N/A Pay zone depth (ft) 0
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 0 psig (surface pressure) after 0 Hours

JUL 24 2012

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

7/23/2012.
Date

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes ✓ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list NO

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

9733' - 9955'	13,169 BBL	239,375 lbs 100 Mesh	180545 lbs 40/70
9441' - 9663'	12,201 BBL	246,669 lbs 100 mesh	180446 lbs 40/70
9029' - 9281'	12,641 BBL	390,681 lbs 100 mesh	173882 lbs 40/70
8679' - 8949'	Stimulation data lost, approximately same as above		

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:		Top Depth	/	Bottom Depth
BURKETT SHALE	@	7490		7610
TULLY LIMESTONE	@	7610		7636
HAMILTON SHALE	@	7636		7930
MARCELLUS	@	7930		8095
ONONDAGA	WDZ			

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 7/23/2012
API #: 47-77-00444

Farm name: Jenkins, Mary Joan Operator Well No.: Husker 2H

LOCATION: Elevation: 1885' Quadrangle: Cuzzart

District: Pleasant County: Preston
Latitude: 6640 Feet South of 79 Deg. 35 Min. 00 Sec.
Longitude 7460 Feet West of 39 Deg. 35 Min. 00 Sec.

Company: Novus Operating, LLC

Address: 2963 Ruger Drive	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Royse City, TX 75189	20" conduct	56.35'	56.35'	Driven
Agent: Charles B. Dollison				
Inspector: Bill Hatfield	13-3/8"	402.8'	402.8'	350 sx
Date Permit Issued: 1/12/2009	48# H40			
Date Well Work Commenced: 6/17/2009				
Date Well Work Completed: 5/25/2010	9-5/8"	2712.5'	2712.5'	875 sx
Verbal Plugging: N/A	36# K55			
Date Permission granted on: N/A				
Rotary [X] Cable [ ] Rig [ ]	5-1/2"	8817'	8814'	708 sx
Total Vertical Depth (ft): Vertical *	17# P110			1263 ft³
Total Measured Depth (ft): 8790'				
Fresh Water Depth (ft.): 300'	2-3/8"		8627.92'	
Salt Water Depth (ft.): 1700'	N 80			
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 85, 149, 200, 345, +400'				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 8715
Gas: Initial open flow NO MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow Meter MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 2245 psig (surface pressure) after 117 Hours

Second producing formation N/A Pay zone depth (ft) 0
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 0 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 0 Hours
Static rock Pressure 0 psig (surface pressure) after 0 Hours

* Directional tools used to straighten hole. No final survey or projection.

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WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Signature Date 7/23/2012

Were core samples taken? Yes_____ No ✓ Were cuttings caught during drilling? Yes ✓ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR | CBL | DIL | CMR

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Interval 1 8715-8735 Interval 2 8658-8694

8715 - 8694 - Universal Acid Job - 4000 gal @ 5.3 bpm @ 7070 psi
8715 - 8694 - Universal Frac Job - 10,267 bbl clean @ 89.8 bpm @ 7069 psi, 233,000 lbs 100 mesh 278,700 lbs 40/70 mesh

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth	/ Bottom Depth
Burkett Shale	8120	8208
Tully Lm	8208	8242
Hamilton Shale	8242	8450
Marcellus Shale	8450	8770
Onondaga	8770	

JUL 24 2014

WR-35
Rev (8-10)

DATE: 8/23/2010
API #: 4707700461

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: LANCO Operator Well No.: 3

LOCATION: Elevation: 1774 Quadrangle: BRANDONVILLE

District: GRANT County: PRESTON
Latitude: 12,140 Feet South of 39 Deg. 45 Min. 0 Sec.
Longitude: 10,260 Feet West of 79 Deg. 35 Min. 0 Sec.

Company: Texas Keystone, Inc.

Address: 560 Epsilon Drive	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Pittsburgh, PA 15238				
Agent: Jon Farmer	13 3/8"	42	42	Sanded In
Inspector: Bryan Harris				
Date Permit Issued: 03/16/09	9 5/8"	378	378	140
Date Well Work Commenced: 06/24/10				
Date Well Work Completed: 06/30/10	7"	1307	1307	175
Verbal Plugging:				
Date Permission granted on:	4 ½"	0	3975	120
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft.): 4028				
Total Measured 4028				
Fresh Water Depth (ft.): 170, 225, 360, 420, 780				
Salt Water Depth (ft.): none reported				
Is coal being mined in the area (N/Y)? N				
Coal Depths (ft.): none reported				
Void(s) encountered (N/Y) Depth(s): N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation: 3rd Riley Pay zone Depth (ft) 3883 - 3889
Gas: Initial open flow: G/S TSTM MCF/D Oil: Initial open flow: 0 Bbl/d
Final open flow 1463 MCF/D Oil: Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: N/A Hours
Static rock Pressure: 1200 psig(surface pressure) after 264 Hours

Second Producing formation: Balltown B Pay zone Depth (ft) 3041 - 3104
Gas: Initial open flow: Co-mingled MCF/D Oil: Initial open flow: 0 Bbl/d
Final open flow Co-mingled MCF/D Oil: Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: N/A Hours
Static rock Pressure: Co-mingled psig(surface pressure) after - Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

8-30-10
Date

Were core samples taken? ___ No X Were cuttings caught durin_ ling? Yes ___ No X

Were N Electrical, N Mechanical, Y or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL

Perforated Intervals, Fracturing, or Stimulating:

Perfed 3rd Riley 3883' - 3389' (18 shots). BD 2974 #. 350 sks 20/40. 658 bbl. Gel Frac.
Perfed Balltown B 3041' - 3104' (56 shots). BD @ 1900 #. 430 sks 20/40. 890 bbl. Gel Frac.
Perfed Speechley A 2766' - 2809' (28 shots). BD 2700 #. 250 sks 20/40. 470 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	22	
SHALE	22	30	
SANDSTONE	30	40	
SANDY SHALE	40	175	1" FW @ 170'
SANDSTONE	175	230	2" FW @ 225'
SANDY SHALE	230	420	1" FW @ 360'
SANDSTONE	420	470	DAMP FW @ 420'
SANDY SHALE	470	570	
SANDSTONE	570	690	
REDROCK SHALE	690	715	
SANDY SHALE	715	731	
LITTLE LIME	731	746	
PENCIL CAVE SHALE	746	755	
BIG LIME	755	909	1/4" FW @ 780'
BIG INJUN SANDSTONE	909	1103	
SANDY SHALE	1103	1226	
WEIR SANDSTONE	1226	1272	
SANDY SHALE	1272	1330	
BEREA SANDSTONE	1330	1374	
SHALE	1374	1393	
GANTZ SANDSTONE	1393	1446	
SANDY SHALE	1446	1967	
UPPER 4TH SAND	1967	2000	
SANDY SHALE	2000	2151	
SHALE	2151	2193	
BAYARD SANDSTONE	2193	2259	
SHALE	2259	2275	
BAYARD B SANDSTONE	2275	2329	
SHALE	2329	2400	
SANDY SHALE	2400	2763	
SPEECHLEY A SANDSTONE	2763	2810	
SANDY SHALE	2810	3007	
BALLTOWN B SANDSTONE	3007	3108	GAS SHOW @3100' TSTM
SHALE	3108	3120	
BALLTOWN C SANDSTONE	3120	3147	
SHALE	3147	3250	
SANDY SHALE	3250	3477	
SHALE	3477	3600	
SANDY SHALE	3600	3869	
3RD RILEY SILTSTONE	3869	3902	GAS SHOW @ 3890' TSTM
SANDY SHALE	3902	4028	TD

Additional Pay Information

Third Producing formation:	Speechley A	Pay zone Depth (ft)	2766 - 2809		
Gas: Initial open flow:	Co-mingled	MCF/D	Oil: Initial open flow:	0	Bbl/d
Final open flow	Co-mingled	MCF/D	Oil: Final open flow:	0	Bbl/d
Time of open flow between initial and final tests:	N/A	Hours			
Static rock Pressure:	Co-mingled	psig(surface pressure) after		-	Hours

WR-35
Rev (8-10)

DATE: 8/23/2010
API #: 4707700540

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: HALL, WILLIAM Operator Well No.: 4

LOCATION: Elevation: 1749 Quadrangle: BRANDONVILLE

District: GRANT County: PRESTON
Latitude: 12,280 Feet South of 39 Deg. 45 Min. 0 Sec.
Longitude: 5,670 Feet West of 79 Deg. 35 Min. 0 Sec.

Company: Texas Keystone, Inc.

Address: 560 Epsilon Drive	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Pittsburgh, PA 15238				
Agent: Jon Farmer	13 3/8"	42	42	Sanded In
Inspector: Bryan Harris				
Date Permit Issued: 01/11/10	9 5/8"	379	379	140
Date Well Work Commenced: 07/01/10				
Date Well Work Completed: 07/08/10	7"	1223	1223	170
Verbal Plugging:				
Date Permission granted on:	4 ½"	0	3178	80
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft.): 3927	1 ½"	0	3040	0
Total Measured 3927				
Fresh Water Depth (ft.): 53, 310, 820, 910, 970				
Salt Water Depth (ft.): none reported				
Is coal being mined in the area (N/Y)? N				
Coal Depths (ft.): none reported				
Void(s) encountered (N/Y) Depth(s): N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation: Bellbown C Pay zone Depth (ft) 3051 - 3061
Gas: Initial open flow: O/S TSTM MCF/D Oil: Initial open flow: 0. Bbl/d
Final open flow 380 MCF/D Oil: Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: N/A Hours
Static rock Pressure: 1067 psig(surface pressure) after 192 Hours

Second Producing formation: Pay zone Depth (ft)
Gas: Initial open flow: MCF/D Oil: Initial open flow: Bbl/d
Final open flow MCF/D Oil: Final open flow: Bbl/d
Time of open flow between initial and final tests: Hours
Static rock Pressure: psig(surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

8-30-10
Date

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SEP 07 2010
WV Department of Environmental Protection

Were core samples taken? ___ No X Were cuttings caught durin filling? Yes ___ No X

Were N Electrical, N Mechanical, Y or Geophysical logs recorded on this well?
Y/N Y/N Y/N

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL.

Perforated Intervals, Fracturing, or Stimulating:

Perfed Balltown C 3051' - 3061' (30 shots). BD 2874 #. 500 sks 20/40. 770 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	17	
SANDSTONE	17	25	
SHALE	25	35	
SANDY SHALE	35	290	1/2" FW @ 53'
SANDSTONE	290	530	1/2" FW @ 510'
REDROCK SHALE	530	597	
LITTLE LIME	597	609	
PENCIL CAVE SHALE	609	637	
BIG LIME	637	779	
BIG INJUN SANDSTONE	779	897	DAMP FW @ 820'
SHALE	897	1072	1/4" FW @ 910'
WEIR SANDSTONE	1072	1131	1/4" FW @ 970'
SHALE	1131	1198	
BEREA SANDSTONE	1198	1245	
SHALE	1245	1277	
GANTZ SANSTONE	1277	1322	
SANDY SHALE	1322	1823	
UPPER 4TH SAND	1823	1868	
SANDY SHALE	1868	2076	
BAYARD SANDSTONE	2076	2130	
SHALE	2130	2262	
SANDSTONE	2262	2346	
SANDY SHALE	2346	2568	
SPEECHLEY A SANDSTONE	2568	2613	
SHALE	2613	2769	
SANDY SHALE	2769	2917	
BALLTOWN C SANDSTONE	2917	3068	GAS SHOW @ 3060' TSTM
SANDY SHALE	3068	3421	
SHALE	3421	3485	
SANDY SHALE	3485	3927	TD

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-31-2012
API #: 47-077-00565

Farm name: Delislow Hunting and Fishing Operator Well No.: 3H (832777)

LOCATION: Elevation: 1709' Quadrangle: 651-Valley Point

District: Grant County: Preston
Latitude: 9158' Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude 11619' Feet West of 79 Deg. 42 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	60'	60'	Driven
Agent: Eric Gillespie	13 3/8"	383'	383'	688 cf
Inspector: Bill Hendershot	9 5/8"	3405'	3405'	1476 cf
Date Permit Issued: 12/27/2010	5 1/2"	13670'	13670'	2571 cf
Date Well Work Commenced: 3/21/2011				
Date Well Work Completed: 10/26/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,841'				
Total Measured Depth (ft): 13,670'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,914'-13,521'
Gas: Initial open flow 2,544 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 5,097 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

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Office of Oil & Gas
MAR 30 2012
WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-29-2012
Date

Were core samples taken? Yes Y No_____ Were cuttings caught during drilling? Yes Y No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-7850' MD; LWD GR from 7005-13670' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

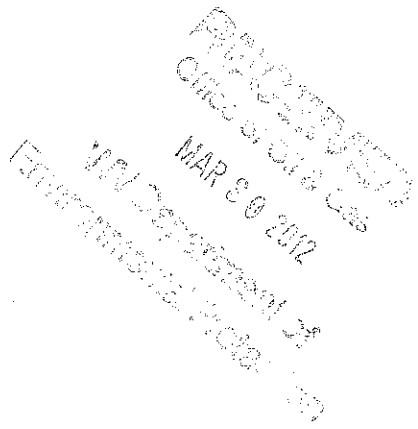
(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 13,578'

Formations Encountered: Top Depth / Bottom Depth
Surface:

(See Attached)

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SS/SILT/SHALE	0	200
SS	200	800
SS/SHALE	800	850
LS/SS	850	950
SS	950	1430
Big Lime	1430	1570
Big Injun	1570	1750
SHALE/SS	1750	2000
SILT/SHALE	2000	3000
SS/SHALE	3000	3300
SILT	3300	3450
SS	3450	3550
SHALE/SILT	3550	7280
Geneseo	7280	7292
Tully	7292	7374
Hamilton	7374	7636
Marcellus	7636	13670



PERFORATION RECORD ATTACHMENT

Well Name and Number: Dellslow Hunting and Fishing 3H (832777)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
10/20/11	13,130	13,521	10/20/11	13,130	13,521	Slk Wtr	11,100	Sand	571,984	68
10/21/11	12,665	13,046	10/21/11	12,665	13,046	Slk Wtr	14,543	Sand	430,689	73
10/21/11	12,189	12,571	10/21/11	12,189	12,571	Slk Wtr	11,964	Sand	501,834	82
10/22/11	11,714	12,096	10/22/11	11,714	12,096	Slk Wtr	9,703	Sand	572,807	87
10/22/11	11,239	11,621	10/22/11	11,239	11,621	Slk Wtr	9,814	Sand	573,026	84
10/23/11	10,764	11,151	10/23/11	10,764	11,151	Slk Wtr	9,835	Sand	573,304	86
10/23/11	10,289	10,671	10/23/11	10,289	10,671	Slk Wtr	8,973	Sand	503,465	81
10/24/11	9,813	10,196	10/24/11	9,813	10,196	Slk Wtr	9,704	Sand	571,023	88
10/24/11	9,339	9,721	10/24/11	9,339	9,721	Slk Wtr	9,480	Sand	571,674	86
10/25/11	8,864	9,246	10/25/11	8,864	9,246	Slk Wtr	14,352	Sand	572,149	84
10/26/11	8,484	8,771	10/26/11	8,484	8,771	Slk Wtr	9,841	Sand	569,185	82
10/26/11	7,914	8,296	10/26/11	7,914	8,296	Slk Wtr	9,377	Sand	569,613	85

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-31-2012
API #: 47-077-00571

Farm name: Dellslow Hunting and Fishing Club Operator Well No.: 8H (833120)

LOCATION: Elevation: 1709' Quadrangle: Valley Point

District: Grant County: Preston
Latitude: 9171' Feet South of 39 Deg. 37 Min. 30 Sec.
Longitude 6382' Feet West of 79 Deg. 42 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	Driven
Agent: Eric Gillespie	13 3/8"	412'	412'	462 cf
Inspector: Bill Hendershot	9 5/8"	3415'	3415'	1522 cf
Date Permit Issued: 5/10/2011	5 1/2"	14107'	14107'	2585 cf
Date Well Work Commenced: 5/16/2011				
Date Well Work Completed: 11/11/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,734'				
Total Measured Depth (ft): 14,116'				
Fresh Water Depth (ft.): 300'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 190'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,883'-13,965'
Gas: Initial open flow 1,786 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 5,027 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-29-2012
Date

Were core samples taken? Yes_____ No N Were cuttings caught during drilling? Yes Y No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list
LWD GR from 7109-14054' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

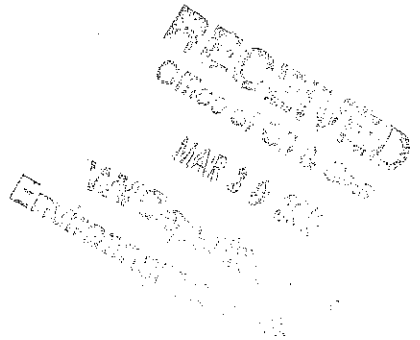
(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 14,093'

Formations Encountered: Top Depth / Bottom Depth
Surface:

(See Attached)

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SS/SILT/SHALE	0	190
Coal	190	200
SS	200	800
SS/SHALE	800	850
LS/SS	850	950
SS	950	1430
Big Lime	1430	1570
Big Injun	1570	1750
SHALE/SS	1750	2000
SILT/SHALE	2000	3000
SS/SHALE	3000	3300
SILT	3300	3450
SS	3450	3550
SHALE/SILT	3550	7275
Geneseo	7275	7298
Tully	7298	7331
Hamilton	7331	7776
Marcellus	7776	14054



PERFORATION RECORD ATTACHMENT

Well Name and Number: Dellslow Hunting and Fishing 8H (833120)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
10/15/11	13,583	13,965	10/15/11	13,583	13,965	Slk Wtr	10,183	Sand	573,180	84.0
10/16/11	13,108	13,490	10/16/11	13,108	13,490	Slk Wtr	10,674	Sand	572,746	83.0
10/16/11	12,633	13,015	10/16/11	12,633	13,015	Slk Wtr	11,761	Sand	569,084	84.0
10/18/11	12,158	12,540	10/18/11	12,158	12,540	Slk Wtr	10,119	Sand	571,934	84.0
10/19/11	11,683	12,065	10/19/11	11,683	12,065	Slk Wtr	9,969	Sand	571,215	83.0
10/19/11	11,206	11,590	10/19/11	11,206	11,590	Slk Wtr	9,903	Sand	573,759	84.0
11/08/11	10,733	11,115	11/08/11	10,733	11,115	Slk Wtr	10,304	Sand	573,374	86.0
11/08/11	10,258	10,632	11/08/11	10,258	10,632	Slk Wtr	9,389	Sand	570,870	83.0
11/08/11	9,783	10,165	11/08/11	9,783	10,165	Slk Wtr	9,665	Sand	571,528	85.0
11/09/11	9,313	9,690	11/09/11	9,313	9,690	Slk Wtr	9,586	Sand	570,058	84.0
11/09/11	8,829	9,215	11/09/11	8,829	9,215	Slk Wtr	11,191	Sand	572,531	83.0
11/10/11	8,355	8,740	11/10/11	8,355	8,740	Slk Wtr	9,553	Sand	568,935	85.0
11/10/11	7,883	8,265	11/10/11	7,883	8,265	Slk Wtr	9,632	Sand	573,996	86.0

WR-35
Rev (5-01)

DATE: 3/2/12
API # : 47-087-04696

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Virginia & Delmar Eagle Operator Well No.: HR 426

LOCATION: Elevation: 734' Quadrangle: Gay, WV 7.5'

District: Reedy County: Roane
Latitude: 6880 Feet South of 38 Deg. 52 Min. 30 Sec.
Longitude 5913 Feet West of 81 Deg. 30 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 2034 Martins Branch Road				
Charleston WV, 25312	20"	16'	16'	N/A
Agent: Marc Scholl	13 3/8"	84'	84'	105Cuft
Inspector: Ed Gainer	9 5/8"	670'	670'	336 CuFt
Date Permit Issued: 6/13/11	7"	2200'	2200'	470 CuFt
Date Well Work Commenced: 12/9/11	4.5"	6786'	6786'	130 CuFt
Date Well Work Completed: 12/28/11				
Verbal Plugging:	Ran Gamma Log from KOP(3670' – 4611'MD)			
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 6853'TMD, 4276'TVD				
Fresh Water Depth (ft.): 60', 512'				
Salt Water Depth (ft.): 1736', 1996'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4179'MD- 6853'MD
4134'TVD – 4276' TVD
Gas: Initial open flow Odor MCF/d Oil: Initial open flow Bbl/d
Final open flow 1200 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure psig (surface pressure) after 72 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed:
By: Pres. Asst
Date: 3/30/12

Formation:	Top:	Bottom:
Soil, Sand, and Shale	0	415
Sand	415	495
Sand	590	610
Salt Sand	1700	1830
Lime	1830	1910
Injun Sand/Squaw	1910	2040
Coffee Shale	2340	2355
Devonian Shale	2355	4276
Lower Huron Section	**4135**	**4276**

Formation depths are TVD

12/18/11 Run 159 jts of R-3 4.5" 11.6ppf N-80 casing with 12-stage Team downhole mechanical packer system to depth of 6786' GL. Land casing through BOP and ND BOP. RU DSA and 10k frac valve. Drop balls for toe sub and follow with low rate N2. Land balls and pressure up on casing to set packers and open Stage sleeve. Open at 3687psi and pumped total of 136k scf N2. RU to perform annular squeeze. Pump total of 100sx type 1 3% mixed at 15ppg.

	Sleeve	Sleeve Size	Ball	Packers
Stage 1	6697.3	HP	N/A	6603.8
Stage 2	6477.0	1.594	1.719	6383.5
Stage 3	6256.7	1.750	1.875	6163.2
Stage 4	6036.4	1.906	2.031	5942.9
Stage 5	5816.1	2.063	2.188	5722.6
Stage 6	5595.5	2.219	2.344	5501.9
Stage 7	5374.9	2.375	2.500	5281.3
Stage 8	5154.4	2.531	2.656	5060.9
Stage 9	4934.1	2.688	2.813	4840.6
Stage 10	4713.6	2.844	2.969	4620
Stage 11	4493.0	3.036	3.250	4399.4
Stage 12	4272.5	3.286	3.500	4179
				2543

12/27/12-12/28/12 MIRU Baker Stim Crew. Start pumping N2 on Stg1 and increase rate as pressure allows. Design rate 100kscf/min. Pump total of 1MMscf N2. Drop ball for Stg 2 and pump ball down with low rate N2. Open sleeve and increase rate to 100kscf/min. Pump total of 1MMscf N2. Drop ball for Stg 3. Repeat process for Stgs 3-12.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6
Max P	5655	5931	5854	5427	5411	5376
Avg P	5440	5714	5701	5313	5360	5319
Max R	107.0	100.0	105.0	112.0	103.0	106.0
Avg R	105.0	95.7	101.0	103.0	101.0	100.0
5 min	2060	2195	2306	2312	2226	2427

	Stg 7	Stg 8	Stg 9	Stg 10	Stg 11	Stg 12
Max P	6019	5965	5686	5423	5154	4615
Avg P	5739	5825	5303	5243	5020	4259
Max R	101.0	103.0	104.0	108.0	105.0	104.0
Avg R	91.0	100.0	102	104.0	103.0	101.0
5 min	2471	2516	N/A	2463	2297	1842

WR-35
Rev (5-01)

DATE: 3/22/12
API # : 47-087-04698

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Russel Moore Operator Well No.: HR 449

LOCATION: Elevation: 670' Quadrangle: Reedy WV 7.5'

District: Reedy County: Roane
Latitude: 8043 Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 6842 Feet West of 81 Deg. 25 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	25	25	N/A
Agent: Marc Scholl	13 3/8"	84	84	56ft3 CTS
Inspector: Ed Gainer	9 5/8"	595	595	300 ft3 CTS
Date Permit Issued: 7/12/11	7"	2334	2334	528 ft3 CTS
Date Well Work Commenced: 1/20/12	4.5"	7268	7268	130 ft3
Date Well Work Completed: 2/15/12				
Verbal Plugging:	Ran Gamma Log from KOP(3515' – 4152'TVD)			
Date Permission granted on:	Ran Gyro log from 3515' - Surface			
Rotary x Cable Rig				
Total Depth (feet): 7329'TMD, 4152'TVD				
Fresh Water Depth (ft.): 60', 200'				
Salt Water Depth (ft.): 1100', 1620'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4245'MD- 7329 'MD
4098'TVD – 4152' TVD
Gas: Initial open flow 375 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 1500+ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: James Hoffman Jr
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1488
Salt Sand	1488	1748
Lime	1748	1788
Injun	1788	1808
Shale	1808	2193
Coffee Shale	2243	2258
Devonian Shale	2258	4152
Lower Huron Section	4066	4152

All depths shown As TVD

01/27/12 Run total of 169 jts of R-3 4.5" 11.6 ppf N-80 casing to depth of 7268' set at 7276' KB). Run 14 stage Packers Plus mechanical packer system. Finish running casing at approx. 2:30am--could not get landing joint out of hanger. Pull hanger back up through table and break out with tongs. Go to second rig and pick up another hanger. Land casing in head and RU flanged 10k valve. MIRU Baker and start pumping N2 at 5:20am. Pressure up to 2700psi and shut down for 20 min--packers set. Resume pumping on casing and pressure up to 4093psi to open shoe. RU to cmt 4x7 annulus. Dump squeeze with 100sx type 1 3% CaCl mixed at 15ppg followed with 3bbl water.

	Sleeve	Sleeve Size	Packers
Stage 1	7275.0	Shoe	7138
Stage 2	7004	1.375	6916
Stage 3	6782	1.625	6693
Stage 4	6559	1.750	6471
Stage 5	6337	1.875	6248
Stage 6	6114	2.125	6026
Stage 7	5892	2.250	5803
Stage 8	5669	2.500	5581
Stage 9	5447	2.625	5358
Stage 10	5224	2.875	5136
Stage 11	5002	3.000	4913
Stage 12	4779	3.250	4690
Stage 13	4557	3.375	4468
Stage 14	4334	3.625	4245
Anchor			2648

02/14/12 MIRU Baker. Pressure test and start pumping at 9:20am. Bring rate up slowly on **Stg 1** and pump total of 1 MMscf N2. Shut down and drop ball for **Stg 2**. Wait 10min for ball and start pumping at 20k scf/min. Land ball and open sleeve at 4597 psi. Up rate and pump total of 1 MMscf N2. Drop ball for **Stg 3**. Repeat for Stg3-Stg14.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7
Max P	5962	5955	5819	5760	5623	5211	5911
Avg P	4929	5408	5647	5678	5506	4936	5830
Max R	94.8	99.0	107.0	106.0	109.0	103.8	103.7
Avg R	83.0	90.5	104.2	105.8	106.9	101.6	102.8
5 min	1918	2120	N/A	N/A	2109	N/A	2050
2 min	2350	2446	2280	2420	2299	2318	2485

	Stg 8	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14
Max P	5795	5687	5816	5979	5811	5529	5333
Avg P	5662	5595	5705	5874	5673	5441	5290
Max R	104.5	106.7	106.9	99.8	105.4	108.0	105.0
Avg R	102.0	102.4	105.5	96.9	104.0	105.0	102.0
5 min	N/A	2189	2198	2248	2137	N/A	2230
2 min	2501	2540	2443	2534	2354	2458	2515

WR-35
Rev (5-01)

DATE: 3/29/12
API # : 47-087-04701

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Roy Delaney Operator Well No.: HR 446

LOCATION: Elevation: 694' Quadrangle: Reedy WV 7.5'

District: Reedy County: Roane
Latitude: 11376 Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 728 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	26	26	N/A
Agent: Marc Scholl	13 3/8"	84	84	N/A
Inspector: Ed Gainer	9 5/8"	635	635	336 ft3 CTS
Date Permit Issued: 7/20/11	7"	2283	2283	513 ft3 CTS
Date Well Work Commenced: 12/19/11	4.5"	7052	7052	N/A
Date Well Work Completed: 1/9/12				
Verbal Plugging:	Ran Gamma Log from KOP(3510' – 4152'TVD)			
Date Permission granted on:	Ran Gamm Log from 2500' - Surface			
Rotary x Cable Rig				
Total Depth (feet): 7105'TMD, 4157'TVD				
Fresh Water Depth (ft.): 200'				
Salt Water Depth (ft.): 1160', 1780'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4111'MD- 7105 'MD
4039'TVD – 4157' TVD
Gas: Initial open flow 800 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 800 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1512
Salt Sand	1512	1772
Lime	1772	1812
Injun	1812	1832
Shale	1832	2217
Coffee Shale	2267	2282
Devonian Shale	2282	4160
Lower Huron Section	4072	4157

All depths shown As TVD

01/09/12 Run total of 164 joints of R-3 4.5" casing 11.6ppf N-80 with 14 stg Packers Plus mechanical packer system. Total depth of casing at 7052' gl. Land casing hanger in head through BOP. SWI. **Will test well as Natural Producer.**

	Sleeve	Sleeve Size	Packers
Stage 1	Shoe	N/A	6919
Stage 2	6786	1.250	6697
Stage 3	6563	1.500	6474
Stage 4	6341	1.625	6252
Stage 5	6118	1.750	6030
Stage 6	5896	2.000	5807
Stage 7	5715	2.125	5626
Stage 8	5492	2.375	5404
Stage 9	5270	2.500	5181
Stage 10	5048	2.750	4959
Stage 11	4825	2.875	4736
Stage 12	4644	3.125	4556
Stage 13	4422	3.250	4333
Stage 14	4199	3.500	4111
Anchor			2598

WR-35
Rev (5-01)

DATE: 3/22/12
API # : 47-087-04703

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Joyce Howard Conrad Operator Well No.: HR 452

LOCATION: Elevation: 712' Quadrangle: Reedy WV 7.5'

District: Reedy County: Roane
Latitude: 13380 Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 2703 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	29	29	N/A
Agent: Marc Scholl	13 3/8"	84	84	56ft3 CTS
Inspector: Ed Gainer	9 5/8"	673	673	324 ft3 CTS
Date Permit Issued: 7/26/11	7"	2332	2332	504 ft3 CTS
Date Well Work Commenced: 1/10/12	4.5"	7419	7419	N/A
Date Well Work Completed: 1/19/12				
Verbal Plugging:	Ran Gamma Log from KOP(3539' – 4161'TVD)			
Date Permission granted on:	Ran Gamm Log from 2600' - Surface			
Rotary x Cable Rig				
Total Depth (feet): 7419'TMD, 4178'TVD				
Fresh Water Depth (ft.): 60'				
Salt Water Depth (ft.): 1208', 1755'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4203'MD- 7419 'MD
4080'TVD – 4178' TVD
Gas: Initial open flow 1200 MCF/d Oil: Initial open flow Bbl/d
Final open flow 1200 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

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Signed: James Joseph Jr
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1530
Salt Sand	1530	1790
Lime	1790	1830
Injun	1830	1850
Shale	1850	2235
Coffee Shale	2285	2300
Devonian Shale	2300	4178
Lower Huron Section	4090	4178

All depths shown As TVD

01/19/12 Run total of 171 jts of R-3 4.5" 11.6 ppf casing to depth of 7362' with 14 stg Packers Plus mechanical packer system. Finish running casing and RU wellhead at 4:00pm. Shut well in. **Will test well as natural producer.**

	Sleeve	Sleeve Size	Packers
Stage 1	7360	Shoe	7187
Stage 2	7047	1.250	6959
Stage 3	6825	1.500	6736
Stage 4	6644	1.750	6513
Stage 5	6421	2.000	6290
Stage 6	6198	2.125	6068
Stage 7	5934	2.250	5845
Stage 8	5711	2.500	5581
Stage 9	5489	2.625	5358
Stage 10	5224	2.875	5135
Stage 11	5001	3.000	4912
Stage 12	4778	3.250	4690
Stage 13	4556	3.375	4426
Stage 14	4292	3.625	4203
Anchor			4647

WR-35
Rev (5-01)

DATE: 3/1/12
API # : 47-087-04707

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: William P. Rogers Operator Well No.: HR 323

LOCATION: Elevation: 970' Quadrangle: Kentuck WV 7.5'

District: Harper County: Roane
Latitude: 4428 Feet South of 38 Deg. 45 Min. 00 Sec.
Longitude 7635 Feet West of 81 Deg. 30 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312				
Agent: Marc Scholl	13 3/8"	33	33	N/A
Inspector: Ed Gainer	9 5/8"	890	890	420 ft3 CTS
Date Permit Issued: 9/21/11	7"	2326	2326	530 ft3 CTS
Date Well Work Commenced: 11/6/11	4.5"	7620	7620	130 CuFt
Date Well Work Completed: 12/4/11				
Verbal Plugging:	Ran Gamma Log from KOP(3784' – 4881'MD)			
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 7666'TMD, 4400'TVD				
Fresh Water Depth (ft.): 575', 650'				
Salt Water Depth (ft.): 1936'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4405'MD- 7666 'MD
4320'TVD – 4400' TVD
Gas: Initial open flow odor MCF/d Oil: Initial open flow Bbl/d
Final open flow 1500+ MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure psig (surface pressure) after 72 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

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NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed:
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	510
Sand	510	595
Sand	650	710
Sand/Shale	710	1780
Salt Sand	1780	2000
Lime	2000	2090
Injun/Squaw	2090	2290
Coffee Shale	2550	2565
Devonian Shale	2565	4400
Lower Huron Section	4320	4400

All formation depths shown As TVD

11/14/11 Run 177 joints of R-3 4.5" 11.6ppf casing with 15 stg Packers Plus Mechanical packer/sleeve completion system. Run total of 7620' KB. RU DSA and 10k frac valve. Start pumping 2 bbl water, drop (2) 1.25" balls for circ shoe and follow with 2 bbl water and N2 at 5k scf/min. Land balls and pressure up to 3000psi. Shut down hold pressure 20min. Continue pumping to open **Stg 1**, pressure up to 3800 psi to open shoe. Pump total of 100sx mixed at 15ppg followed with 4bbl water on annulur squeeze. SWI.

	Sleeves	Packers	Size	Ball
Stage 1	7620	7484	N/A	N/A
Stage 2	7350	7261	1.25	1.5
Stage 3	7169	7038	1.5	1.625
Stage 4	6946	6815	1.625	1.75
Stage 5	6723	6592	1.75	1875
Stage 6	6501	6370	1.875	2
Stage 7	6275	6147	2	2.125
Stage 8	6055	5924	2.125	2.375
Stage 9	5832	5701	2.375	2.5
Stage 10	5609	5479	2.5	2.75
Stage 11	5386	5256	2.75	2.875
Stage 12	5163	5033	2.875	3.125
Stage 13	4940	4810	3.125	3.25
Stage 14	4717	4586	3.25	3.5
Stage 15	4494	4405	3.5	3.75
		2642		

12/3/12 – 12/4/12 MIRU Baker Stim crew. Start pumping on Stg 1 at half rate and work up to design rate of 100kscf/min. Pump total of 1MMscf. Shut down and drop ball for stage 2. Pump ball to sleeve with low rate N2 and open sleeve. Up rate and pump total of 1MMscf N. Drop ball for Stage 3 and repeat process for Stgs 3 – 15.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7	Stg 8
Max P	5975	5979	5990	5980	5968	5697	5460	5583
Avg P	5650	5914	5838	5840	5704	5620	5402	5530
Max R	98.2	100.0	106.8	102.0	105.0	109.0	103.4	104.0
Avg R	95.1	98.0	94.2	100.0	102.0	104.0	102.4	103.0
5 min	1984	2020	2238	2313	2085	2171	2318	N/A

	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14	Stg 15
Max P	5873	5603	5624	4661	5137	5159	4960
Avg P	5789	5562	5534	4530	5072	4979	4882
Max R	109.0	103.0	107.0	104.0	105.0	103.5	107.0
Avg R	107.0	102.0	105.0	103.0	104.0	102.0	104.0
5 min	2453	N/A	2356	1955	2236	2100	2179

WR-35
Rev (5-01)

DATE: 3/22/12
API # : 47-087-04708

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Orland Greenleaf Operator Well No.: HR 453

LOCATION: Elevation: 705' Quadrangle: Peniel WV 7.5'

District: Reedy County: Roane
Latitude: 1201 Feet South of 38 Deg. 52 Min. 30 Sec.
Longitude 7409' Feet West of 81 Deg. 25 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	**Used in drilling**	**Left in well**	**Cement fill up Cu. Ft.**
Address: 1244 Martins Branch Road				
Charleston WV, 25312	20"	18	18	N/A
Agent: Marc Scholl	13 3/8"	84	84	56ft3 CTS
Inspector: Ed Gainer	9 5/8"	633	633	306 ft3 CTS
Date Permit Issued: 9/21/11	7"	2332	2332	537 ft3 CTS
Date Well Work Commenced: 1/28/12	4.5"	7632	7632	130 ft3
Date Well Work Completed: 2/16/12				
Verbal Plugging:	Ran Gamma Log from KOP(3560' – 4122'TVD)			
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 7713'TMD, 4159'TVD				
Fresh Water Depth (ft.): 50'				
Salt Water Depth (ft.): 1660'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4200'MD- 7713 'MD
4080'TVD – 4159' TVD
Gas: Initial open flow 120 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow 1500+ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: James Hatfield Jr
By: President
Date: 3/30/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1524
Salt Sand	1524	1784
Lime	1784	1824
Injun	1824	1844
Shale	1844	2229
Coffee Shale	2279	2294
Devonian Shale	2294	4172
Lower Huron Section	4095	4159

All depths shown As TVD

02/06/12 Run total of 176 jts of 4.5" 11.6ppf N-80 casing to depth of 7632' set at 7637' KB. Run 16 stage packers plus system. Pick up and assemble 10k wellhead. Start pumping N2 to pressure up and set packers. Pump N2 and pressure up to 3000psi and hold for 20min. Continue to pump N2 for total of 154k scf to open pump out shoe at 3816psi. RU and perform annular squeeze with 100sx mixed at 15ppg (21 bbl). Follow cmt with 3 bbl water.

	Sleeve	Sleeve Size	Packers
Stage 1	7638	P/O Shoe	7501
Stage 2	7367	1.375	7278
Stage 3	7144	1.625	7055
Stage 4	6963	1.750	6832
Stage 5	6740	1.875	6609
Stage 6	6517	2.000	6387
Stage 7	6253	2.125	6164
Stage 8	6030	2.250	5941
Stage 9	5849	2.375	5718
Stage 10	5584	2.500	5495
Stage 11	5361	2.750	5272
Stage 12	5138	2.875	5049
Stage 13	4915	3.000	4826
Stage 14	4734	3.125	4603
Stage 15	4511	3.250	4423
Stage 16	4330	3.500	4200
Anchor			2642

02/15/12 Start pumping on **Stg 1** and bring trucks to rate. Pump total of 1 MMscf N2. SD and drop ball for **Stg 2.** Wait for ball. Start pumping ball down at 20k scf/min and land on seat. Up rate and open sleeve at 4486psi. Bring trucks to rate and pump total of 1 MM scf. Drop ball for **Stg 3.** Wait for ball to drop. Pump N2 to open sleeve – Repeat stim process for Stg 3- Stg 16.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7	Stg 8
Max P	5968	5976	5742	5694	5439	5446	5086	5210
Avg P	4245	5945	5602	5543	5301	5371	5036	5036
Max R	105.0	100.0	105.0	106.0	107.0	107.0	105.0	111.0
Avg R	80.0	98.7	103.0	105.0	105.0	106.8	104.0	105.0
5 min	1924	2099	2042	2092	1985	2006	1965	2015
2 min	2305	2499	2238	2246	2255	2241	2188	2211

	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14	Stg 15	Stg 16
Max P	5099	5256	5219	5018	5037	4628	4538	4398
Avg P	5020	5210	5146	4998	4865	4567	4494	4099
Max R	110.0	106.0	109.0	103.0	103.0	105.4	104.0	103.0
Avg R	106.0	105.0	106	102.0	102.0	4567.0	102.0	89.0
5 min	2044	2293	2163	2268	2040	2084	2214	2120
2 min	2149	2500	2360	2426	2174	2173	2320	2230

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 08/30/2012
API #: 47-091-00825 F

Farm name: Greathouse, Willa Jo Operator Well No.: Short #1

LOCATION: Elevation: 1410.00 Quadrangle: Grafton

District: Court House County: Taylor
Latitude: 7,500 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 3.900 Feet West of 80 Deg. 02 Min. 30 Sec.

Company: Petroleum Development Corporation

Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	32'	32'	Sanded In
Agent: Bob Williamson	8 5/8"	1108'	1108'	345
Inspector: Bryan Harris	4 1/2"	4550'	4550'	245
Date Permit Issued: WorkOver:8/15/2005			Squeeze	319
Date Well Work Commenced: 10/06/2005				
Date Well Work Completed: 10/17/2005				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 4576'				
Total Measured Depth (ft): 4576'				
Fresh Water Depth (ft.): 70', 105', 360'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 70-73				
Void(s) encountered (N/Y) Depth(s) N				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Benson Pay zone depth (ft) 4424-4425.5
Gas: Initial open flow 97 MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 163 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1450 psig (surface pressure) after _____ Hours

Second producing formation 4th Sand Pay zone depth (ft) 2410-2435
Gas: Initial open flow 20 MCF/d Oil: Initial open flow --------- Bbl/d
Final open flow Not Taken MCF/d Final open flow --------- Bbl/d
Time of open flow between initial and final tests ---------- Hours
Static rock Pressure 100 psig (surface pressure) after 72 Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature 08/31/2012
Date

Were core samples taken? Yes_____ No XX Were cuttings caught during drilling? Yes_____ No XX

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Allegheny GR/PPT/TT
Cased Hole Bond Log from 2595' - 1900'.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Short #1 (47-091-00825) Re-completion: Original Benson perfs from 4424-4426 and TOC at 3465. Set Bridge Plug at 2490' & cement squeeze over 4thSS. Run Allegheny Bond Log & new cmt. top at 2060'. RU Universal on 10/17/2005 & frac with energized cross link with 500 gal 15% HCl, 400 sks of 20/40 Sand,and 110,000 scf Nitrogen in 513 bbls treated fluid. Break at 2475, avg TP at 2371 psi. Treat at avg. rate of 23.1 bpm.

Plug Back Details Including Plug Type and Depth(s): CIBP set at 2490' & left in hole after work-over frac.

Formations Encountered: Top Depth / Bottom Depth
Surface:

See "Well Log" (pg. 2) on original Completion Form.

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 08/30/2012
API #: 47-091-00826 F

Farm name: Greathouse, Willa Jo Operator Well No.: Short #2

LOCATION: Elevation: 1464.00 Quadrangle: Grafton

District: Court House County: Taylor
Latitude: 7,225 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 6,100 Feet West of 80 Deg. 02 Min. 30 Sec.

Company: Petroleum Development Corporation

Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	32'	32'	Sanded In
Agent: Bob Williamson	8 5/8"	1111'	1111'	322
Inspector: Bryan Harris	4 1/2"	4628'	4628'	234
Date Permit Issued: WorkOver: 8-15-2005				
Date Well Work Commenced: 10/06/2005				
Date Well Work Completed: 10/11/2005				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 4659'				
Total Measured Depth (ft): 4659'				
Fresh Water Depth (ft.): 105'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 101-105, 684-689, 855-860				
Void(s) encountered (N/Y) Depth(s) N				

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OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Benson Pay zone depth (ft) 4518-4519.5
Gas: Initial open flow 84 MCF/d Oil: Initial open flow ---- Bbl/d
Final open flow 174 MCF/d Final open flow ---- Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1300 psig (surface pressure) after _____ Hours

Second producing formation 4th Sand Pay zone depth (ft) 2245-2260
Gas: Initial open flow 20 MCF/d Oil: Initial open flow ---------- Bbl/d
Final open flow Not Taken MCF/d Final open flow ---------- Bbl/d
Time of open flow between initial and final tests ---------- Hours
Static rock Pressure Not Taken psig (surface pressure) after ---------- Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature 08/31/2012
Date

Were core samples taken? Yes_____ No XX Were cuttings caught during drilling? Yes_____ No XX

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Allegheny GR/PPT/TT
Cased Hole Bond Log from 2500' - 1600'.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Short #2 (47-091-00826) Re-completion: Original Benson perfs from 4518-4520 and TOC at 1748. Set Bridge Plug at 2700' & perforate 4th SS from 2449' - 2521'. Frac with energized cross link with 500 gal 15% HCl, 330 sks of 20/40 Sand, and 83,000 scf Nitrogen in 451 bbls treated fluid. Break at 2884, avg. TP at 2405 psi. Treat at avg. rate of 21.2 bpm. ISIP at 1947 psi.

Plug Back Details Including Plug Type and Depth(s): CIBP set at 2700' & drilled out to original TD (4600') after work-over frac.

Formations Encountered: Top Depth / Bottom Depth
Surface:

See "Well Log" (pg. 2) on original Completion Form.

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-19-2012
API #: 47-097-03707

Farm name: Tall Trees Operator Well No.: 6H (831667)

LOCATION: Elevation: 1664' Quadrangle: Rock Cave

District: Banks County: Upshur
Latitude: 4,200' Feet South of 38 Deg. 50 Min. 00 Sec.
Longitude 5,610' Feet West of 80 Deg. 20 Min. 00 Sec.

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Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	20"	20"	Driven
Agent: Eric Gillespie	13 3/8"	475'	475'	533 cf
Inspector: Bill Hatfield	9 5/8"	2173'	2173'	1009 cf
Date Permit Issued: 2-17-2010	5 1/2"	12725'	12725'	2794 cf
Date Well Work Commenced: 8/18/2010				
Date Well Work Completed: 1/13/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,814				
Total Measured Depth (ft): 12,728'				
Fresh Water Depth (ft.): 350'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,310'-12,585'
Gas: Initial open flow 4,939 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 3,066 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

4-2-2012
Date

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list n/a

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement PBTD 13,331'

Formations Encountered: Top Depth / Bottom Depth
Surface:

(See Attached)

LITHOLOGY	TOP DEPTH (FT)	BOTTOM DEPTH (FT)
SLTSTN / SHALE	0	1250
BIG LIME	1250	1270
SLTSTN / SHALE	1270	1470
BIG INJUN	1470	1518
SHALE / SLTSTN	1518	1772
GORDON	1772	1800
SLTSTN / SHALE	1800	2152
SHALE / SLTSTN	2152	3822
BENSON	3822	3830
SLTSTN / SHALE	3830	6814
GENESEO	6814	6830
TULLY	6830	6915
HAMILTON	6915	7037
MARCELLUS	7037	12728

PERFORATION RECORD ATTACHMENT

Well Name (Number): **Tall Trees 6H (831667)**

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
12/28/2010	12,263	12,585	12/28/2010	12,263	12,585	Slk Wtr	9,809	Sand	396,043	85.0
12/29/2010	11,863	12,185	12/29/2010	11,863	12,185	Slk Wtr	14,737	Sand	403,837	78.0
12/30/2010	11,463	11,785	12/30/2010	11,463	11,785	Slk Wtr	10,445	Sand	370,503	82.0
1/5/2011	11,063	11,397	1/1/2011	11,063	11,397	Slk Wtr	17,239	Sand	394,372	72.0
1/6/2011	10,663	10,985	1/6/2011	10,663	10,985	Slk Wtr	11,131	Sand	397,280	82.0
1/7/2011	10,263	10,585	1/7/2011	10,263	10,585	Slk Wtr	8,890	Sand	405,472	81.0
1/8/2011	9,943	10,185	1/8/2011	9,943	10,185	Slk Wtr	8,427	Sand	325,463	77.0
1/9/2011	9,303	9,625	1/9/2011	9,303	9,625	Slk Wtr	9,127	Sand	404,044	84.0
1/10/2011	8,903	9,225	1/10/2011	8,903	9,225	Slk Wtr	9,963	Sand	399,363	84.0
1/11/2011	8,503	8,825	1/11/2011	8,503	8,825	Slk Wtr	8,718	Sand	406,391	84.0
1/12/2011	8,103	8,425	1/12/2011	8,103	8,425	Slk Wtr	8,622	Sand	402,316	83.0
1/12/2011	7,703	8,025	1/12/2011	7,703	8,025	Slk Wtr	8,640	Sand	404,732	83.0
1/13/2011	7,310	7,622	1/13/2011	7,310	7,622	Slk Wtr	8,746	Sand	439,453	83.0

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-18-2012
API #: 47-097-03708

Farm name: Tall Trees Operator Well No.: 8H (831679)

LOCATION: Elevation: 1,664' Quadrangle: Rock Cave

District: Banks County: Upshur
Latitude: 4,196' Feet South of 38 Deg. 47 Min. 30 Sec.
Longitude 4,940 Feet West of 80 Deg. 20 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	20'	20'	driven
Agent: Eric Gillespie	13 3/8"	470'	470'	480 cf
Inspector: David Jackson	9 5/8"	2162'	2162'	962 cf
Date Permit Issued: 10/27/2010	5 1/2"	11888'	11887'	1796 cf
Date Well Work Commenced: 7/18/2010				
Date Well Work Completed: 1/13/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 6,932'				
Total Measured Depth (ft): 11,887'				
Fresh Water Depth (ft.): 350'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,179'-11,741'
Gas: Initial open flow 2,713 MCF/d Oil: Initial open flow - Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure 3,119 psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

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WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

4-2-2012
Date

Were core samples taken? Yes_____ No X_____ Were cuttings caught during drilling? Yes X_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, resistivity

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

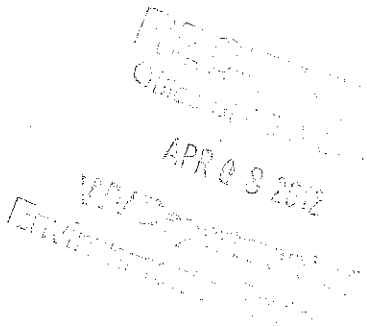
Plug Back Details Including Plug Type and Depth(s): Cement @ 11,786'

Formations Encountered: Top Depth / Bottom Depth

Surface:

(See Attached)

LITHOLOGY	TOP DEPTH (FT)	BOTTOM DEPTH (FT)
SLTSTN / SHALE	0	1250
BIG LIME	1250	1270
SLTSTN / SHALE	1270	1470
BIG INJUN	1470	1518
SHALE / SLTSTN	1518	1772
GORDON	1772	1800
SLTSTN / SHALE	1800	2152
SHALE / SLTSTN	2152	3822
BENSON	3822	3830
SLTSTN / SHALE	3830	6704
GENESEO	6704	6757
TULLY	6757	6842
HAMILTON	6842	6891
MARCELLUS	6891	11887



PERFORATION RECORD ATTACHMENT

Well Name (Number): **Tall Trees 8H (831679)**

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
12/28/2010	11,419	11,741	12/28/2010	11,419	11,741	Slk Wtr	10,933	Sand	398,949	80.0
12/29/2010	11,019	11,341	12/29/2010	11,019	11,341	Slk Wtr	8,350	Sand	347,146	88.0
12/30/2010	10,619	10,941	12/30/2010	10,619	10,941	Slk Wtr	9,582	Sand	396,645	85.0
1/3/2011	10,219	10,541	1/3/2011	10,219	10,541	Slk Wtr	9,281	Sand	432,187	85.0
1/4/2011	9,899	10,141	1/4/2011	9,899	10,141	Slk Wtr	7,685	Sand	335,050	86.0
1/5/2011	9,579	9,821	1/5/2011	9,579	9,821	Slk Wtr	7,593	Sand	321,833	86.0
1/6/2011	9,179	9,501	1/6/2011	9,179	9,501	Slk Wtr	9,620	Sand	414,018	86.0
1/7/2011	8,779	9,101	1/7/2011	8,779	9,101	Slk Wtr	8,905	Sand	405,261	83.0
1/8/2011	8,379	8,701	1/8/2011	8,379	8,701	Slk Wtr	10,240	Sand	405,053	84.0
1/9/2011	7,979	8,301	1/9/2011	7,979	8,301	Slk Wtr	10,449	Sand	398,815	83.0
1/10/2011	7,579	7,901	1/10/2011	7,579	7,901	Slk Wtr	8,790	Sand	408,189	84.0
1/11/2011	7,179	7,501	1/11/2011	7,179	7,501	Slk Wtr	8,558	Sand	397,374	84.0

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-24-2012
API #: 47-097-03710

Farm name: James Ogden Operator Well No.: 5H (831781)

LOCATION: Elevation: 1,950' Quadrangle: Rock Cave

District: Banks County: Upshur
Latitude: 8,495' Feet South of 38 Deg. 50 Min. 00 Sec.
Longitude 9,250' Feet West of 80 Deg. 15 Min. 00 Sec.

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WV Department of
Environmental Protection

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	40'	40	Driven
Agent: Eric Gillespie	13 3/8"	580'	580'	614 cf
Inspector: Bill Hatfield	9 5/8"	2407'	2407'	1059 cf
Date Permit Issued: 1/27/2010	5 1/2"	13293'	13293'	2761 cf
Date Well Work Commenced: 11/4/2010				
Date Well Work Completed: 5/10/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 7,152'				
Total Measured Depth (ft): 13,294'				
Fresh Water Depth (ft.): 475'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): n/a				
Void(s) encountered (N/Y) Depth(s) Y 144'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Pay zone depth (ft) 7,622'-13151'
Gas: Initial open flow 2,662 MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure 3,218 psig (surface pressure) after ____ Hours

Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-21-2012
Date

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list none

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attached

Plug Back Details Including Plug Type and Depth(s): BP@ 13,152'

Formations Encountered: Top Depth / Bottom Depth
Surface:

see attached

FORMATION/LITHOLOGY	TOP DEPTH (ft)	BOTTOM DEPTH (ft)
SS and Shale	0	1425
Big Lime	1425	1646
Big Injun	1646	1850
SS and Sltst w/ minor Shale	1850	2450
Sltst w/ minor Shale	2450	3998
Benson	3998	4400
Sltst and SS w/ minor Shale	4400	4950
Sltst and Shale w/ minor SS	4950	6650
Sltst and Shale	6650	6795
Geneseo	6795	7140
Tully	7140	7163
Hamilton	7163	7315
Marcellus	7315	13293

PERFORATION RECORD ATTACHMENT

Well Name and Number: James Ogden 5H (831781)

PERFORATION RECORD			STIMULATION RECORD							
	Interval Perforated					*Fluid*		*Propping Agent*		Average
Date	From	To	Date	Interval Treated		Type	Amount	Type	Amount	Injection
3/1/2011	12,829	13,151	3/1/2011	12,829	13,151	Slk Wtr	9,327	Sand	430,760	85
3/12/2011	12,429	12,751	3/12/2011	12,429	12,751	Slk Wtr	11,367	Sand	416,240	84
3/13/2011	12,029	12,351	3/13/2011	12,029	12,351	Slk Wtr	10,365	Sand	482,440	84
3/13/2011	11,629	11,951	3/13/2011	11,629	11,951	Slk Wtr	9,684	Sand	404,620	85
3/14/2011	11,229	11,551	3/14/2011	11,229	11,551	Slk Wtr	9,770	Sand	451,880	82
3/14/2011	10,829	11,144	3/14/2011	10,829	11,144	Slk Wtr	10,393	Sand	482,060	85
3/15/2011	10,429	10,751	3/15/2011	10,429	10,751	Slk Wtr	10,371	Sand	481,660	83
3/15/2011	10,029	10,351	3/15/2011	10,029	10,351	Slk Wtr	10,085	Sand	481,900	85
3/16/2011	9,632	9,951	3/16/2011	9,632	9,951	Slk Wtr	18,200	Sand	411,700	83
3/16/2011	9,229	9,551	3/16/2011	9,229	9,551	Slk Wtr	10,308	Sand	427,830	85
3/17/2011	8,836	9,151	3/17/2011	8,836	9,151	Slk Wtr	13,902	Sand	481,800	75
3/17/2011	8,436	8,751	3/17/2011	8,436	8,751	Slk Wtr	9,991	Sand	481,120	85
3/18/2011	8,029	8,351	3/18/2011	8,029	8,351	Slk Wtr	10,278	Sand	479,420	85
3/19/2011	7,622	7,951	3/19/2011	7,622	7,951	Slk Wtr	14,701	Sand	447,500	78

Survey Report

Digital Drilling Data Systems, LLC

Company: Chesapeake Appalachia LLC
Well: James Ogden 5H
API or UWI:
State: WV
County: Upsur
Comment

Location: French Creek
Rig: Nomac 37
Job Number: SEM -10625
Operator: Sharewell MWD Service LP
Magnetic Declination: 0.00
Proposed Azimuth: 341.96
North Reference: GRID

Tiein Survey Data:

MD	Inclination	Azimuth	TVD	NS	EW
7556.00	88.90	342.90	7152.35	1168.29	954.04

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
7615.00	90.40	343.20	7152.71	1224.72	936.84	37.41	1541.95	874.40	2.59
7678.00	90.60	343.10	7152.16	1285.02	918.58	35.56	1579.57	937.38	0.35
7740.00	91.20	343.30	7151.19	1344.36	900.66	33.82	1618.18	999.36	1.02
7803.00	89.70	343.30	7150.69	1404.70	882.56	32.14	1658.95	1062.34	2.38
7867.00	89.80	343.40	7150.97	1466.02	864.22	30.52	1701.79	1126.32	0.22
7929.00	90.20	343.40	7150.97	1525.43	846.51	29.03	1744.57	1188.30	0.65
7993.00	90.40	343.60	7150.64	1586.80	828.33	27.57	1789.99	1252.27	0.44
8056.00	90.70	343.30	7150.03	1647.19	810.39	26.20	1835.74	1315.25	0.67
8120.00	91.00	343.20	7149.08	1708.46	791.94	24.87	1883.09	1379.23	0.49
8183.00	90.10	341.30	7148.48	1768.46	772.74	23.60	1929.91	1442.22	3.34
8246.00	90.30	341.30	7148.26	1828.13	752.54	22.37	1976.96	1505.21	0.32
8306.00	90.50	341.10	7147.84	1884.93	733.21	21.26	2022.51	1565.21	0.47
8369.00	90.60	341.00	7147.23	1944.51	712.75	20.13	2071.02	1628.20	0.22
8432.00	90.80	341.00	7146.46	2004.07	692.24	19.06	2120.26	1691.18	0.32
8495.00	90.00	341.80	7146.02	2063.78	672.15	18.04	2170.48	1754.18	1.80

8557.00	88.80	342.80	7146.67	2122.84	653.30	17.11	2221.09	1816.17	2.52
8621.00	88.70	343.10	7148.07	2184.01	634.54	16.20	2274.33	1880.15	0.49
8684.00	88.80	342.50	7149.44	2244.18	615.91	15.35	2327.17	1943.12	0.97
8748.00	88.80	342.10	7150.78	2305.14	596.46	14.51	2381.06	2007.11	0.62
8811.00	88.80	342.20	7152.10	2365.09	577.15	13.71	2434.50	2070.09	0.16
8874.00	88.80	342.00	7153.42	2425.03	557.79	12.95	2488.35	2133.08	0.32
8938.00	88.60	342.40	7154.88	2485.95	538.23	12.22	2543.55	2197.06	0.70
9001.00	88.40	342.40	7156.52	2545.98	519.19	11.53	2598.38	2260.04	0.32
9065.00	88.50	342.10	7158.26	2606.91	499.69	10.85	2654.37	2324.02	0.49
9128.00	89.10	341.90	7159.57	2666.82	480.22	10.21	2709.71	2387.00	1.00
9191.00	89.10	341.80	7160.56	2726.67	460.60	9.59	2765.30	2449.99	0.16
9255.00	89.00	341.80	7161.63	2787.46	440.61	8.98	2822.07	2513.98	0.16
9317.00	88.80	341.50	7162.82	2846.30	421.10	8.42	2877.28	2575.97	0.58
9380.00	89.10	342.10	7163.97	2906.14	401.42	7.86	2933.73	2638.96	1.06
9443.00	89.10	341.70	7164.96	2966.01	381.85	7.34	2990.49	2701.95	0.63
9505.00	89.00	341.10	7165.99	3024.77	362.08	6.83	3046.36	2763.94	0.98
9569.00	89.00	340.90	7167.10	3085.27	341.25	6.31	3104.08	2827.92	0.31
9633.00	90.10	341.30	7167.61	3145.82	320.52	5.82	3162.10	2891.91	1.83
9697.00	90.40	342.30	7167.33	3206.61	300.53	5.35	3220.67	2955.91	1.63
9759.00	90.80	342.50	7166.68	3265.71	281.78	4.93	3277.84	3017.90	0.72
9822.00	89.60	343.30	7166.46	3325.92	263.26	4.53	3336.32	3080.89	2.29
9886.00	89.50	342.50	7166.96	3387.09	244.44	4.13	3395.90	3144.88	1.26
9949.00	89.30	343.60	7167.62	3447.35	226.08	3.75	3454.75	3207.87	1.77
10013.00	89.20	343.50	7168.46	3508.72	207.95	3.39	3514.88	3271.84	0.22
10075.00	89.40	343.80	7169.22	3568.21	190.50	3.06	3573.29	3333.81	0.58
10137.00	88.90	342.90	7170.14	3627.60	172.74	2.73	3631.71	3395.78	1.66
10204.00	87.80	343.10	7172.07	3691.65	153.16	2.38	3694.82	3462.74	1.67
10267.00	88.20	343.10	7174.26	3751.89	134.86	2.06	3754.31	3525.69	0.63
10330.00	88.60	342.80	7176.02	3812.10	116.39	1.75	3813.88	3588.65	0.79
10393.00	87.80	342.20	7178.00	3872.15	97.46	1.44	3873.38	3651.62	1.59
10457.00	87.70	341.90	7180.52	3932.99	77.75	1.13	3933.76	3715.57	0.49
10520.00	87.50	342.20	7183.15	3992.87	58.35	0.84	3993.30	3778.51	0.57
10583.00	87.60	342.20	7185.85	4052.80	39.11	0.55	4052.99	3841.46	0.16
10646.00	87.70	341.80	7188.43	4112.67	19.66	0.27	4112.71	3904.40	0.65
10710.00	87.80	341.40	7190.94	4173.35	-0.53	359.99	4168.38	3963.63	0.64
10773.00	88.00	341.40	7193.25	4233.02	-20.61	359.72	4233.27	4031.50	0.32
10837.00	88.50	342.60	7195.21	4293.86	-40.38	359.46	4294.01	4095.25	2.03

10900.00	88.90	342.80	7196.63	4353.99	-59.11	359.22	4354.35	4158.21	0.71
10963.00	88.90	342.70	7197.84	4414.15	-77.79	358.99	4414.81	4221.22	0.16
11026.00	89.20	342.90	7198.89	4474.32	-96.41	358.77	4475.39	4284.25	0.57
11090.00	89.60	342.60	7199.56	4535.44	-115.39	358.54	4536.90	4348.21	0.78
11153.00	89.50	342.10	7200.05	4595.47	-134.49	358.32	4597.42	4411.19	0.81
11215.00	89.60	341.90	7200.54	4654.43	-153.65	358.11	4656.96	4473.19	0.36
11279.00	88.90	342.70	7201.38	4715.40	-173.11	357.90	4718.60	4537.22	1.66
11342.00	88.40	342.30	7202.86	4775.46	-192.05	357.70	4779.34	4600.19	1.02
11405.00	88.10	343.70	7204.79	4835.68	-210.46	357.51	4840.27	4663.15	2.27
11469.00	88.20	344.20	7206.85	4897.16	-228.14	357.33	4902.46	4727.06	0.80
11532.00	88.70	344.10	7208.56	4957.74	-245.34	357.17	4963.80	4789.99	0.81
11595.00	88.90	344.10	7209.88	5018.31	-262.60	357.00	5025.17	4852.93	0.32
11658.00	88.90	344.10	7211.08	5078.89	-279.85	356.85	5086.62	4915.90	0.00
11721.00	89.50	344.00	7211.96	5139.46	-297.16	356.69	5148.05	4978.84	0.97
11784.00	89.60	343.90	7212.46	5200.00	-314.58	356.54	5209.52	5041.80	0.22
11848.00	90.40	343.80	7212.46	5261.48	-332.38	356.39	5271.96	5105.76	1.26
11911.00	89.00	344.00	7212.79	5322.00	-349.85	356.24	5333.50	5168.73	2.24
11974.00	89.20	344.00	7213.78	5382.56	-367.22	356.10	5395.07	5231.67	0.32
12038.00	89.50	344.00	7214.50	5444.07	-384.86	355.96	5457.68	5295.64	0.47
12102.00	89.30	342.70	7215.18	5505.38	-403.19	355.81	5520.12	5359.59	2.05
12166.00	89.60	342.20	7215.79	5566.40	-422.49	355.66	5582.40	5423.58	0.91
12229.00	88.80	342.10	7216.67	5626.36	-441.80	355.51	5643.68	5486.58	1.28
12291.00	88.50	342.10	7218.13	5685.35	-460.85	355.37	5703.99	5548.57	0.48
12353.00	88.70	342.40	7219.64	5744.38	-479.75	355.23	5764.37	5610.55	0.58
12415.00	88.90	342.70	7220.94	5803.51	-498.33	355.09	5824.87	5672.54	0.58
12478.00	88.90	342.90	7222.15	5863.68	-516.96	354.96	5886.42	5735.51	0.32
12541.00	88.90	342.90	7223.36	5923.89	-535.48	354.83	5948.05	5798.51	0.00
12604.00	89.20	342.60	7224.41	5984.04	-554.16	354.71	6009.64	5861.47	0.67
12667.00	89.50	341.90	7225.12	6044.04	-573.37	354.58	6071.18	5924.49	1.21
12729.00	89.80	341.90	7225.50	6102.97	-592.63	354.45	6131.68	5986.48	0.48
12790.00	89.00	342.00	7226.14	6160.96	-611.53	354.33	6191.25	6047.48	1.32
12853.00	87.80	341.50	7227.90	6220.77	-631.25	354.21	6252.72	6110.45	2.06
12916.00	88.40	342.70	7229.99	6280.69	-650.60	354.09	6314.29	6173.40	2.13
12979.00	89.20	343.40	7231.31	6340.94	-668.96	353.98	6376.14	6236.40	1.69
13043.00	89.30	343.10	7232.14	6402.22	-687.41	353.87	6439.01	6300.36	0.49
13107.00	89.10	342.70	7233.04	6463.38	-706.22	353.76	6501.86	6364.36	0.00
13107.00	89.10	342.70	7233.04	6463.38	-706.22	353.76	6501.86	6364.36	0.70

13170.00	89.20	342.30	7233.97	6523.46	-725.16	353.66	6563.64	6427.34	0.65
13234.00	89.00	341.80	7234.98	6584.33	-744.89	353.55	6626.33	6491.32	0.84
13244.00	89.20	341.60	7235.13	6593.83	-748.03	353.53	6636.13	6501.34	2.83
13293.00	89.20	341.60	7235.82	6640.32	-763.49	353.44	6684.08	6550.34	0.00 PTB

WR-35

21 August 2012

API # 47-10100104

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm name: Pardee **Operator Well No.:** ECA/Pardee 3

LOCATION:
Elevation: 1577'
Quadrangle: Hacker Valley
District: Holly
County: Webster
Latitude: 80° 29' 20.3 "
Longitude: 38° 39' 39.7 "

Company: EASTERN AMERICAN ENERGY CORPORATION
501 56th Street
Charleston, WV 25328

Agent: Rod Winters

Inspector: Craig Duckworth

Permit Issued: 01/11/2007

Well work commenced: 07/13/2007

Well work completed: 10/11/2007

Verbal plugging

Permission granted on:

Rotary X Cable ___ Rig

Total Depth (feet): 6777'

Fresh water depths (ft): 140', 295'

Salt-water depths (ft): 1124'

Is coal being mined in area? (Y/N) No

Coal Depths (ft): N/A

Casing & Tubing	Used in Well	Left in Well	Cement Fill Up Cu. Ft.
9-5/8"	696'	696'	305 sks
7"	2367'	2367'	240 sks
4-1/2"	6739'	6739'	265 sks

Open Flow Data

Gas: Initial open flow N/A MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow ___ MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests ___ Day
Static rock pressure N/A psi (surface pressure) after ___ Hours

1st Producing Formation Marcellus Pay zone depth (ft) 6450'- 6500'
2nd Producing Formation ___ Pay zone depth (ft) ___
3rd Producing Formation ___ Pay zone depth (ft) ___
4th Producing Formation ___ Pay zone depth (ft) ___

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Rod Winters , Agent
For: EASTERN AMERICAN ENERGY CORPORATION

By: Designated Agent
Date: 21 August 2012

STAGE ONE: Marcellus
Shots 6450' – 6500'

60Q Foam Frac 71482 lbs sand. 1.778 MMcf N2

FORMATION COLOR, HARD OR SOFT	TOP FEET	BOTTOM FEET
K.B.	0	10
Fill	10	20
Sand	20	50
Sandy Shale	50	63
Sand	63	172
Sandy Shale	172	444
Salt Sand	444	641
Salt Sand	641	756
Coal	756	760
Salt Sand	760	800
Sandy Shale	800	815
Shale "R.R."	815	955
Sandy Shale	955	1021
Sand	1021	1037
Sandy Shale	1037	1170
Shale	1170	1250
Little Lime	1250	1290
Blue Monday	1290	1340
Big Lime	1340	1570
Sandy Shale	1570	1655
Shale	1655	1765
Gantz	1765	1825
Shale	1825	1840
Gordon	1840	1870
Shale	1870	2029
Fifth Sand	2029	2083
Sandy Shale	2083	3523
Shale	3523	3647
Sandy Shale	3647	3930
Benson	3930	3955
Shale	3955	4160
Sandy Shale	4160	4327
Alexander	4327	4360
Sandy Shale	4360	4985
Shale	4985	6556
Marcellus	6556	6617
Onondaga	6617	6620
Huntersville	6620	6777

REMARKS
Including indication of all fresh & salt water, coal, oil & gas

Hole damp @ 140'
2" H2O @ 295'
Damp @ 1124'

Gas Checks:

1000'- N/S
1325'- N/S
2100'- N/S
4020'- N/S
4979'- N/S
5578'- N/S
5795'- N/S
6009'- N/S
6630'- N/S
Collars'- N/S

WR-35

Date July 8, 2008
API # 47 - 103 - 02292

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm Name: Coastal Timberlands Co Operator Well No.: Cox 510845

LOCATION: Elevation: 881' Quadrangle: Pine Grove
District: Grant County: Wetzel
Latitude: 11,100' feet South of 39° DEG. 35' MIN. 0" SEC.
Longitude: 620' feet West of 80° DEG. 37' MIN. 30" SEC.

Company: Equitable Production Company
1710 Pennsylvania Avenue
Charleston, WV 25302

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
16"		44'	
11 3/4"		761'	400 sks

RECEIVED Office of Oil & Gas SEP 05 2008 WV Department of Environmental Protection

Agent: Rex C. Ray
Inspector: David Cowan
Permit Issued: 10/3/2007
Well Work Commenced: April 22, 2008
Well Work Completed: May 6, 2008
Verbal Plugging: YES
Permission granted on: May 6, 2008
Rotary X Cable ____
Total Depth (feet) 1910'
Fresh Water Depths (ft) 190'
Salt Water Depths (ft) 1600'
Is coal being mined in area (Y / N) ? N
Coal Depths (ft) none reported

OPEN FLOW DATA

Producing Formation ____ Pay Zone Depth (ft) ____
Gas: Initial Open Flow ____ MCF/d Oil: Initial Open Flow ____ Bbl/d
Final Open Flow ____ MCF/d Final Open Flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock pressure ____ psig surface pressure after ____ Hours

Second Producing Formation ____ Pay Zone Depth (ft) ____
Gas: Initial Open Flow ____ MCF/d Oil: Initial Open Flow ____ Bbl/d
Final Open Flow ____ MCF/d Final Open Flow ____ Bbl/d
Time of open flow between initial and final tests ____ Hours
Static rock pressure ____ psig surface pressure after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1.) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2.) THE WELL LOG WHICH IS SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE

For: EQT PRODUCTION COMPANY

By: [signature]
Date:

FORMATION	TOP	BOTTOM	REMARKS
Sand & Shale	1	1910	

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 03/30/12
API #: 47-103-02661

Farm name: Rix, Earl H. - Revocable Living Trust Operator Well No.: Green Dot Unit II 1H

LOCATION: Elevation: 1,493' Quadrangle: Littleton 7.5'

District: Clay County: Wetzel
Latitude: 9,325' Feet South of 39 Deg. 42 Min. 30.0 Sec.
Longitude 1,685' Feet West of 80 Deg. 32' Min. 30.0 Sec.

Company: Grenadier Energy Partners, LLC

Address: CT Corportion, 707 Virginia Street East 15th Floor, Charleston, WV 25301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: Dianna Stamper	24"	40'	40'	Grouted In
Inspector: Derek Haught	16"	417'	417'	452 cu.ft (CTS)
Date Permit Issued: 08/08/2011	11-3/4"	1765'	1765'	994 cu.ft (CTS)
Date Well Work Commenced: 11/25/2011	8-5/8"	2788'	2788'	661 cu.ft
Date Well Work Completed: 01/30/2012	5-1/2"	12,619'	12,619'	2450 cu.ft (CTS)
Verbal Plugging:				
Date Permission granted on:				
Rotary [X] Cable [ ] Rig [ ]				
Total Vertical Depth (ft): 7688'				
Total Measured Depth (ft): 12,652'				
Fresh Water Depth (ft.): Est. 270'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation Marcellus Shale Pay zone depth (ft) 7755' - 12505' MD (7688' TVD)
Gas: Initial open flow 9,910 MCF/d Oil: Initial open flow -- Bbl/d
Final open flow -- MCF/d Final open flow -- Bbl/d
Time of open flow between initial and final tests -- Hours
Static rock Pressure 4415 psig (surface pressure) after 168 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

4/2/12
Date

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - Gamma Ray

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: Total Perforated Interval (7755' - 12505' MD)

Fluid: 141,170 bbl Slickwater pumped in 13 Stages

Sand: 2,849,925 lbs 100 mesh sand, 3,127,123 lbs 40/70 sand

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Top Depth / Bottom Depth

Surface:

See Attached Sheet

Green Dot Unit II 1H

Formation/Lithology	From	To
Shale	16	49
Red Rock	49	89
Sand & Shale	89	99
Red Rock	99	175
Sand & Shale	175	237
Red Rock	237	254
Sand & Shale	254	374
Red Rock	374	389
Sand & Shale	389	1049
Shale	1049	1424
Lime	1424	1432
Red Rock	1432	1484
Sand	1484	2292
Lime	2292	2327
Big Lime	2327	2429
Injun	2429	2580
Sand & Shale	2580	3197
Gordon	3197	3234
Sand & Shale	3265	6774
Rhinestreet Shale	6774	7229
Sonya	7229	7405
Genesee Shale	7405	7478
Geneseo Shale	7478	7501
Tully Lime	7501	7505
Hamilton	7505	7588
Marcellus Shale	7588	N/A

WR-35 API # 47 - 109-02603

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

Farm Name : Hughes Operator Well No. : 1

LOCATION: Elevation: 1458.66' Quadrangle: Oceana

District: Clear Fork County: Wyoming

Latitude: 14,090 Feet South of 37 Deg. 40 Min. 00 Sec.

Longitude: 7,140 Feet West of 81 Deg. 40 Min. 00 Sec.

Company: Classic Oil and Gas Resources
416 West Brannon Road
Nicholasville, KY 40356-8845

Agent: ROBERT INGHRAM

Inspector: Barry Stollings
Permit Issued: 11-04-05
Well Work Commenced: 11-04-05
Well Work Completed: 12-21-05
Verbal Plugging
Permission granted on: N/A
Rotary X Cable ____ Rig
Total Depth (feet) 5342'
Fresh water depths (ft) 990'

Salt water depths (ft) None

Is coal being mined in area (Y/N)? N
119'-20', 1013'-15'
Coal Depths (ft): 1122'-25', 1365'-67'
OPEN FLOW DATA

Casing & Tubing	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
Size 12 3/4"	25'	25'	n/a
9 5/8"	0'	0'	n/a
7"	1603'	1603'	230 sks
4 1/2"	5318'	5318'	262 sks

Producing formation L. Shale, M. Shale, Big Lime Pay zone depth (ft) See Back
Gas: Initial open flow Show MCF/d Oil: Initial open flow s0 Bbl/d
Final open flow 411 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests n/a Hours
Static rock Pressure 550 psig (surface pressure) after 24 Hours
Second producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ MCF/d Oil: Initial open flow ____ Bbl/d
Final open flow ____ MCF/d Final open flow ____ Bbl/d
Time of open flow between inital and final tests ____ Hours
Static rock Pressure ____ psig (surface pressure) after ____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1).DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) . THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

CLASSIC OIL & GAS RESOURCES, INC.
BY: William Kelly
Date: 8-19-06

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

12-16-05: 3 Stage frac with Schlumb: Shale 5042'-5190' (18 shots) - N2 frac - 355,600 Scf N2, BDP 2495#, ATP 2134#, AIR 49,000 Scf/min, ISIP 2325#. M.Shale 4727'-4916' (20 shots) - Variable Quality foam frac - 30,129# 20/40 sand, 99 bbl total fluid, 360,600 Scf N2, BDP 2388#, ATP 2306#, AIR 24 BPM, ISIP 2112#. Big Lime 2793'-2801' (17 shots) - 2750 gal 28% Hcl, energized with 56,100 Scf N2, BDP 2238#, ATP 850#, AIR 11 BPM, ISIP 600#. Flow back to pit on choke

FORMATION	TOP	BOTTOM	OIL, GAS, WATER
Pennsylvanian Sands, shales, coals	0'	1252	
Princeton	1756'	1780'	
Ravencliff	1869'	1914'	
Upper Maxton	2040'	2078'	
Middle Maxton	2310'	2348'	
Lower Maxton	2516'	2542'	
Big Lime	2760'	3066'	
Injun	----	----	
Weir	----	----	
Berea	3633'	3674'	
Gordon	----	----	
Devonian Shale	3674'	5342' TD	Gas at TD - Show

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

API # 4710903032

MAILED
2-1-10

Farm Name Heartwood Forestland Well Number 507491

Location Elevation 1,347 Quadrangle MALLORY

District Clear Fork County Wyoming, WV

			Degree	Minute	Second
Latitude	9670	FSL	37.00	40.00	0.00
Longitude	4480	FWL	81.00	45.00	0.00

Company EQT Production Company
1710 Pennsylvania Avenue Charleston, WV 25328

Agent Cecil Ray

Inspector Barry Stollings

Permit Issued 05/21/2008

Well Work Commenced 11/04/2008

Well Work Completed Well has not been completed

Verbal Plugging

Permission granted on _____

Rotary Rig X Cable Rig _____

Total Depth 5,204

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cubic Ft
13 3/8	35	35	
9 5/8	678	678	324.30
7	2,526	2,526	552.10

Water Encountered

Type	From
Fresh water	5" stream @ 430'

RECEIVED
Office of Oil & Gas
SEP 05 '12
WV Department of
Environmental Protection

Coal & Open Mines

Type	From

Open Flow Data

Producing Formation _____ Pay Zone Depth (ft): See attached for details

Gas: Initial Open Flow 0 MCF 01/01/1900 Date Oil: Initial Open Flow _____ Bbl/d

Final Open Flow 0 MCF _____ Date Final Open Flow _____

Time of open flow between initial and final tests 0 hours

Static Rock Pressure 0 after 0 hours

Second Producing Formation _____ Pay Zone Depth (ft) _____

Gas: Initial Open Flow _____ MCF _____ Date Oil: Initial Open Flow _____ Bbl/d

Final Open Flow _____ MCF _____ Date Final Open Flow _____

Time of open flow between initial and final tests _____ hours

Static Rock Pressure _____ after _____ hours

NOTE: On back of this form put the following
1) Details of Perforated intervals, fracturing or stimulating, physical change,etc.
2) The well log, a systematic detailed geological record of all formations including coal encountered in the well bore

For Equitable Production Company

By Mike Butcher

Date 1-25-2010

Well Number 507491

EQT Company
WR-35 Completion Report - Attachment
Well Treatment Summary

API # 4710903032

Stage1	
Date	
FracTyp	
Zone	
# of Perfs	
From/To	—
BD Press	
ATP Psi	
Avg Rate	
Max Press Psi	
ISIP Psi	
10min SIP	5 min.
Frac Gradient	
Sand Proppant	
Water-bbl	
SCF N2	
Acid-gal	gal

Formation Name	Depth To	Depth Bottom	Formation Thick
SALT SAND	700.00	1,253	553.00
RAVENCLIFF SAND	1,477.00	1,517	40.00
UPPER MAXTON SAN	1,700.00	1,765	65.00
MIDDLE MAXTON SA	2,155.00	2,263	108.00
LOWER MAXTON SA	2,377.00	2,410	33.00
LITTLE LIME	2,456.00	2,520	64.00
Greenbrier MKR 1	2,485.67	0	0.00
PENCIL CAVE SHALE	2,520.00	2,532	12.00
BIG LIME	2,532.00	2,886	354.00
UNION	2,616.30	0	0.00
PICKAWAY	2,694.22	0	0.00
TAGGARD SHALE	2,803.46	0	0.00
DENMAR	2,812.62	0	0.00
PS 30	3,006.38	0	0.00
WEIR SAND	3,007.00	3,118	111.00
PS 20	3,065.62	0	0.00
SUNBURY	3,453.00	3,472	19.00
BEREA SAND	3,472.00	3,516	44.00
UPPER DEVONIAN	3,515.42	0	0.00
GORDON SAND	3,810.02	3,824	13.98

estimated tops

Gas Tests

Depth	Remarks
2,944	trace
3,168	trace
3,579	trace
4,010	trace